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THE OPEN UNIVERSITY

Faculty of Education and Language Studies (FELS)

Doctorate in Education (EdD)

**The relationship between teacher talk and children's possibility
thinking in the Drama Game method in Cypriot primary education**

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Abstract

Drawing on a socio-constructivist conceptual framework and connecting to current work in the area of creativity, drama and teacher talk, this study seeks to reveal features of children's possibility thinking (PT), types of teacher talk and the relationship between these two strands during the Drama Game (DG) method in Cypriot primary classrooms. This is the first empirical study in Cyprus concerning the DG method; drama is a new curriculum area in primary education (CMEC, 2011b). Possibility thinking has been conceptualized as a process of thinking leading to creative development (Craft, 2000), although its relation with teacher talk has not been fully illuminated. The empirical study undertaken in this thesis involved two teachers and four classes of 8-9 year-old children in two urban public primary schools. Six lessons were naturalistically explored using the following qualitative data collection methods: video-recorded classroom observations, interviews with the teachers and group interviews with children using video-stimulated review. The analysis of the findings sought to combine deductive and inductive analytic methods. The aim was to test the evidence-based concept of PT and also identify emergent themes and relationships regarding children's PT and teacher talk. The study identified that children's PT, manifest through their talk and physical engagement, was in interplay with teacher's PT manifest through talk and body language. It revealed that the teacher's 'Possibility Broadening Communicative Style' (possibility broad questions, provocations, modelling, pauses, and affirmative feedback) framed the open, playful, immersive and collaborative context for nurturing children's PT. The children's PT in turn was manifest through a co-determined endeavour amongst the children and their teachers to find solutions to imagined problems in the world of DG.

Keywords: *Drama Game, creativity, possibility thinking, teacher talk*

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1 Introduction

1.1 The wider context

This study is situated in Cypriot primary education, a multicultural context that is experiencing political, economical and social problems (CMEC, 2012). It is argued that such global problems need ecological and ethical solutions so that the planet lives sustainably (Craft, 2005). New sustainable solutions are, Craft argues, more likely to be found by creative thinkers who continually search for ways to contribute to human progress and fulfillment; persons who imagine ‘what if’ and consider how life might be different. Craft (2009, p.19) posits:

It is creativity which enables a person to identify appropriate problems and to solve them. It is creativity that identifies possibilities and opportunities that may not have been noticed by others.

Within the current climate in Cyprus, education is in the process of broad educational reform. The Cypriot policy arena has shown emerging interest in creativity since 2009, the European Year of Creativity and Innovation. The promotion of creativity and innovation in schools was one of the major aims for schools during 2008-2010 (CMEC, 2008, 2010). These policy papers had suggested the implementation of projects and various other practical activities for the promotion of children’s creativity. These were, it should be noted, mostly artistic endeavours or scientific experiments; suggested pedagogical strategies included problem-solving, brainstorming, developing divergent thinking, differentiation of teaching methods and use of ICT (CMEC, 2008, 2010). The Cypriot Foundation for the Management of European Lifelong Learning Programmes also organised a conference on creativity and innovation for

all schools to send teachers and students to participate in (CMEC, 2009). During the school year 2011-2012, teachers were expected to develop children's critical thinking, creativity and collaboration (CMEC, 2011a). This policy paper refers to creativity as the ability necessary for the 21st century; it suggests schools and classrooms should become 'learning laboratories' in which children, collaborating with each other and with their teachers, would be able to find problems and search for solutions. In this way, it is argued, 'children will acquire agency of their learning and live their childhood vividly in a free democratic country' (CMEC, 2011a, p.2).

Based on the policy documents, we can see that in current Cypriot educational settings the role of the teacher is considered extremely significant in uncovering and advancing children's creativity in the classroom. However, as Jeffrey and Craft (2004) have suggested, the constitution of creative pedagogic practices may be more transparent if the focus is both on teacher and learner and the interplay between them. This is what this study attempts to do. It seeks to shed light on the relationship between teacher talk and children's possibility thinking (PT) in the Drama Game (DG) method in Cypriot primary classrooms. The teaching process is examined through analysis of two teachers talk (male and female), also the learning process is explored in relation to the children's manifestation of PT features. PT is considered a process of thinking leading to creative development across domains and across levels from little-c to Big-C creativity (Craft, 2000). The notion of PT viewed as the driver of creativity is considered in more detail in the next chapter. DG is an educational improvisational activity during which participants create an imaginary world to playfully explore shared issues, meanings and relationships. The definitions of PT, DG and talk utilised in this study are discussed later in separate sections of the literature review.

The Cypriot policy arena has also shown considerable interest in drama education recently as a new curriculum area under the more general subject of 'Language and Culture'. It is seen as an alternative way of learning that, it is argued, has the potential to promote creativity (CMEC, 2011b). The Cypriot drama policy document is written by a team of scholars who have specialised in drama/theatre education in England (CMEC, 2011b). However, there is no empirical research base on drama in Cyprus to support the decisions and recommendations made by policy-makers, which provides a rationale for this research study which seeks to fill the gap concerning the value of drama in primary children's creativity in Cypriot primary education. The study attempts to explore specific pedagogical elements that relate to children's PT, and focuses upon two teachers and 79 children (aged 8-9) in two urban public schools situated in different Cypriot towns.

1.2 The research questions

At the very beginning of this research study I proposed to examine:

- a) How DG may impact on students' learning in the Greek language lesson (oral language, listening, and writing).
- b) How the use of DG in the Greek language lesson may affect students' emotional skills (self-expression, imagination, motivation, creativity).
- c) How the use of DG in the Greek language lesson may affect students' social skills (trust, collaboration, empathy, respect).

My first research questions revealed a belief on my part of the potential of DG in education. My professional role as a primary teacher and particularly the use of DG in my practice had prompted me to develop an interest in the reasons why this method seemed more effective compared to other pedagogical strategies I was using, particularly with reference to children's

active and constructive participation in DG's collaborative activities. However, my novice research skills and non-empirically based assumptions had led me to hypothesise that such broad research questions would be manageable during an EdD research study. I came to recognise that I had to focus on less in order to explore issues in depth and that many of the issues I was interested in are interrelated. I then decided to focus on creativity as recently it has been a fundamental aim in Cypriot education (CMEC 2008, 2009, 2010, 2011a).

During the pilot study I started to study the notion of PT, as an evidence-based driver of creativity (Burnard, Craft and Cremin, 2006; Chappell, Craft, Burnard and Cremin, 2008; Cremin, Burnard and Craft, 2006; Craft, Cremin, Burnard and Chappell, 2008). The pilot aimed to explore the nature and characteristics of talk and possibility thinking in the DG activity in two Cypriot primary classrooms, investigating both teacher and children's talk and children's PT. An interesting emergent finding identified in the pilot study was the influence of teacher 'voice' on young learners' PT in this context. The pilot revealed some possible sub-categories of teacher talk during the DG, such as narration, question-posing and responding, instructions and modelling, support and praise. So, I decided that in the main study I would explore the relationship between teacher talk and children's PT, shifting away from the words 'influence' and 'affect' which are too directional. Over time I settled upon the following research questions:

- a) *What features of children's PT are evident during the DG?*
- b) *What types of teacher talk are evident during the DG?*
- c) *What is the relationship between teacher talk and children's PT during the DG?*

Children's PT was planned to be documented through children's verbal and non-verbal behaviour. Also, the working definition of teacher talk included types of talk and non-verbal behaviour. Although I had also studied much literature on teachers' prosodic elements of voice,

I decided to leave the aspect of prosody as a question for further research because its documentation needs special meters for tracking and analysis and potentially a larger sample; thus I chose to focus on types of teacher talk and body language.

In the following chapter I examine the literature relevant to address the three questions, in particular examining creativity and PT, drama and DG, teacher talk and body language in primary education. Following the systematic presentation of literature, I turn to the methodology employed in this study and seek to explain my underlying epistemological and ontological stance, as well as the range of methods used, the sample, ethical issues and the process of analysis. Next the thesis focuses on the data and in the following two chapters I present the findings related to the research questions and discuss these, linking to the relevant literature. Finally, I draw conclusions based on my key findings and seek to make clear the contribution of my research study, both theoretically and methodologically, discussing the limitations of this work and the possible implications for policy, practice and further research.

2 Literature review

As promoted by educational policy in Cyprus, creativity is seen as ability necessary for the 21st century and schools are called to provide the conditions where children, collaborating with each other and with their teachers, will be able to find problems and search for solutions gaining agency over their learning (CMEC, 2011a). For this reason, I review literature on creativity in education and conceptualise what it is and how it is related to teacher pedagogy. Then, an evidenced-based driver of creativity called ‘possibility thinking’ and work on this is examined. The next section of the literature review investigates drama and particularly DG as the educational context in which this study is situated. Additionally, its relation to creativity and PT is explored. The final section of this review, in the light of my research questions, critically analyses studies of teacher talk and its relation to creativity, PT and drama. Literature on teacher non-verbal communication is also visited.

Overall, through this review, I followed the suggestions of Boote and Beile (2005) and tried to place my research problem in the historical contexts of the fields; I sought to acquire the subject vocabulary and attempted to resolve ambiguities in the terminology adopted by different researchers. I considered important issues relevant to creativity, drama and talk in education and tried to gain a new perspective on the literature. In addition, I sought to critique the various theoretical and empirical studies in terms of argument, methodology and findings, in order to reveal gaps and areas for potential enquiry that have relevance in my professional context; thus I am able to rationalise both the practical and scholarly significance of my study.

2.1 Creativity in education

2.1.1 Conceptions of creativity in education

2.1.1.1 Traditions of creativity

There are various conceptions of creativity in the literature revealing its complexity. After a long philosophical theorisation of creativity (Niu & Sternberg, 2006), it was only during the twentieth century that systematic studies of creativity began to be undertaken.

These systematic studies of creativity have been related to four general traditions: a) the psychoanalytic- creativity is associated with the unconscious modes of thought such as repressed emotions and unsatisfied wishes that emerge into consciousness through the subconscious, for example daydreams or fantasies (Freud, 1958, cited in European Communities, 2009); b) the cognitive- creativity is considered as thinking skills such as divergent thinking, a notion identified by Guilford in 1950 and measured by psychometric tools developed in America by Torrance during 60s and onwards (Torrance, 1966); c) the behaviouristic- creativity is connected to operant conditioning such as rewards; it is the individual's response to environmental stimuli (Skinner, 1960, 1974, cited in Craft, 2005); and d) the humanistic- the creative person acts in harmony with an inner need for self-actualisation; creativity is an everyday phenomenon of the individual who takes control of his life and feels fulfilled (Maslow, 1970).

The question of whether everyone is capable of being creative was raised by all traditions, so in the second half of the twentieth century some researchers turned to study the personality characteristics of creative people (Torrance, 1965). The personality approach to creativity was based on tests designed to measure individual's creative potential, for example Torrance's (1966) tests which highlight for example: strong opinions, curiosity, independent thinking,

intuition, vision, risk-taking, and a fascination for tasks. However, there are researchers who disagree with some of the above characteristics as being part of the creative potential; they stress cultural differences regarding the conceptualisation of creativity (Lim, 2004; Ng, 2003).

Contemporary scholars have suggested that everyone can be creative; this approach of democratic, everyday or 'little-c' creativity affords it a place within education (Craft, 2005; Czikszentmihalyi, 1996; Robinson, 2001). Craft (2000, 2001, 2002, 2005, 2009, and 2011) studied creativity in education and theorised creativity as a developmental process, distinguishing 'Big-C' from 'little-c' creativity. 'Big-C Creativity' is considered as the extraordinary creativity of geniuses in particular fields such as science, mathematics, art, dance. High creators are considered those who change domains of knowledge or create new ones characterised by excellence and recognition, in addition to innovation/novelty and originality (Czikszentmihalyi, 1996). 'Little-c' creativity, Craft (2001) argues, is manifest in ordinary people; it involves trying out different possibilities, identifying and solving problems and moving on and coping with everyday challenges e.g. inventing a meal, developing a new game or making up a rhyme.

Recently, a new model of creativity expanded this dichotomy proposing a Four C categorisation: the mini-c, the little-c, the Pro-c and the Big-C Creativity (Kaufman & Beghetto, 2009). This was developed, according to the authors, to highlight important distinctions among the various levels of creativity. For example, mini-c, they assert, relates to the creative insight inherent in the learning process, which is intra-personally meaningful and which may be overlooked in the world of little-c approaches. The authors seem to understand little-c creativity as an interpersonal sharing of creative ideas, whilst for Craft (2005) the intrapersonal and interpersonal dimensions are all part of little-c creativity (Craft *et al.*, 2012a). In addition, Pro-c creativity, Kaufman and Beghetto (2009) argue, represents the professional-

level expertise in a creative area without reaching the eminence of a Big-C creator. The Four-C model provided a framework for a more detailed conceptualisation of creativity, although it has not been empirically tested. My study adopts a little-c conceptualisation of creativity and seeks to focus on children's creativity in the DG context illuminating further the connections between interpersonal and intrapersonal creativity.

The role of education in nurturing the creativity of children is underpinned by the assumption that creativity can be developed and there is considerable work seeking to document this (Craft, 2005, 2009; Cremin, 2009; Kaufman & Beghetto, 2009; Lin, 2011; Runco & Pagnani, 2011; Sawyer *et al.*, 2003). But how does creativity develop?

At first, it is important to recognise that many empirical researchers have considered creativity a process that develops in stages, rather than static traits of personality or creation of products (Craft, 2005; Csikszentmihalyi, 1996; Kaufman & Beghetto, 2009; Robinson, 2001; Runco & Pagnani, 2011; Sternberg, 2003, Wallas, 1926) without agreeing on the exact stages. The four stages of the creative process most widely used are: preparation, incubation, inspiration or illumination and verification (Wallas, 1926). Preparation involves the gathering of skills, principles and data, a time of discipline and focus. Incubation by contrast involves the doing of nothing, resting and connecting to the unconscious. This is an essential period of receptivity and openness, sometimes even chaos or muddle. Inspiration or illumination is the moment of insight. Finally verification involves the evaluation of the insight by the conscious and refining of the outcome. The above stages, Wallas (1926) argues, constantly overlap and interweave in action.

The most prominent approaches that suggest creativity can be developed may be the confluence approaches. These include the socio-constructivist model (Vygotsky, 1978), the consensual assessment technique (Amabile, 1982), the investment theory (Sternberg & Lubart,

1991) and the social systems model (Czikszentmihalyi, 1996). All these models highlight the social aspect in the psychology of creativity, which I have chosen as the theoretical background of this research study because of the social context developed during the DG method. Thus a closer examination of each of these is appropriate.

Vygotsky's socio-constructivist model stressed the importance of social context for cognitive development and creativity (Vygotsky, 1978). The creative potential, he argued, is there in every individual who is able to construct new meanings. His theory, although not resting on empirical research, was found to be useful in education; he argued that students can, with help from adults or more capable peers, understand concepts that they cannot understand on their own, in their zone of proximal development (ZPD). This conception strengthens the importance of the interpersonal variables of creativity along with the intrapersonal ones and particularly of the social relations within the classroom. Moran and John-Steiner (2003), analysing Vygotsky's contemporary contribution to the dialectic of development and creativity, asserted that through collaboration individuals can form mutual ZPDs in which to continue their own and each other's creative development. The shared thinking produced by the interaction may be then considered as a process internalised by the individual for later use. Children's creative development, it is argued by Faulkner, Coates, Craft and Duffy (2006), comes about through a dialectical interaction between individual and social processes, such as actions, physical and symbolic artefacts, narratives and conversations, and imaginative activities. Vygotsky also stressed the importance of play and emotions for the development of children's creative imagination, claiming that in fantasy play a real situation takes on a new and unfamiliar meaning (Vygotsky, 2004). This is why my study, investigating creativity in the playful classroom context of DG, draws upon his theory and tries to offer empirical insights about creative thought and language in the primary classroom.

The work of Amabile (1982, 1996) shows how individual creativity may be affected by the immediate social environment, such as home and school. She developed a three-component theory of creativity including intrinsic motivation, expertise (domain-relevant knowledge and abilities) and creative-thinking skills (coping with complex problems, generating novel ideas, concentrated effort and energy) and highlighted the balance between individual and collective creativity. Although much research has concentrated on this latter area during the last decade (e.g. Chappell, 2006; Chappell, Craft, Rolfe and Jobbins, 2012; Craft *et al.*, 2012b), there is still a gap concerning the ways that both individual and collective creativity can be developed in certain domains. My study attempts to study creativity through PT in the collaborative DG activity, raising issues that perhaps contribute to its manifestation and development.

Another confluence and multi-disciplinary approach that drew on the work of Amabile is the investment theory typified by the empirical work of Sternberg and Lubart (1991). These scholars claimed that creative performance results from a confluence of six different but interrelated resources: intellectual abilities, knowledge, styles of thinking, personality, motivation and the person's environmental context. They posited that investment in improving any of these could improve creativity. Their theory differs from others because it understands creativity as a decision-making process. Sternberg (2003) suggested many ways to develop creativity in schooling, such as questioning assumptions, encouraging idea generation, risk-taking and tolerance of ambiguity, helping children building self-efficacy, delaying gratification, modelling creativity, and allowing time to think creatively and make mistakes. In addition, he highlighted encouraging creative collaboration, developing empathy and maximising the fit between person and environment. His theory is optimistic because it argues that everyone can be creative if they decide to be so, though many people do not actually make this decision, perhaps because of multiple consequences and 'high costs' involved (*ibid*). It

would be useful to consider what exactly are these 'costs' in schools and what do we, as teachers, have to do in order to minimise these 'costs' for ourselves and the children.

Czikszentmihalyi (1996) taking a different systems approach viewed creativity as a phenomenon resulting from an interaction of field, domain and individual. The domain, he suggested, is a culturally defined symbol system that preserves and transmits creative products to future generations; the individual changes the domain producing new ideas via cognitive processes, personality traits and motivation. The field, he argued, consists of expert people and controls the domain evaluating the new ideas. Czikszentmihalyi (1996) is also acknowledged for his theory on 'flow' and the psychology of discovery and invention; he connected creativity with the conditions for 'flow' -defined as the optimal experience of enjoyment coming automatically in a focused state of consciousness (p.110). Considering this, we may hypothesise that in order to develop creativity in education, teachers must help children get immersed in the symbolic world of each domain, be sensitive to their goals and desires, let students control their learning and find enjoyment in this playful process.

Creativity research under the confluence approaches made a methodological shift from the more positivist tests to the case-study approach for analysing complex issues in depth (Burnard, 2011). The research under this arguably more ethnographic approach has revealed cultural differences in the conceptualisation of creativity; hence a cultural psychology of creativity has developed. The distinction between this new approach and the social psychological approach to creativity seems to be the assumption of embodying culture in the nature of creativity and not seeing social factors as external conditioning context (Glăveanu, 2010). The social factors are deemed not just to facilitate or constrain the process of creativity but determine its nature working from within the individual. It is argued that there are important differences in the conceptualisation of creativity by different cultures (Glăveanu,

2010; Lim, 2004; Ng, 2003; Niu & Sternberg, 2006; Runco & Pagnani, 2011). For example, the Western culture is considered to have given emphasis to novelty and usefulness in contrast to the Eastern focus on beauty, revelation and self-actualisation (Glăveanu, 2010; Runco & Pagnani, 2011).

My study attempts to shed light to some cultural elements of creativity such as language, both verbal and non-verbal, but does not attempt to consider the possible cultural differences among the children, since it is a small-scale study and does not search for the socio-cultural background of each child or teacher. I adopt a socio-constructivist approach to creativity which focuses on the social relationships taking place in the classroom. I therefore seek to explore the enabling context created and the pedagogical means that may help to develop children's creativity in the DG classroom. I now turn to some empirical studies on the characteristics of creative teaching and then consider recent conceptual frameworks of creative practice and creative pedagogy.

2.1.1.2 Creative pedagogies

Many researchers have studied the characteristics of creative teaching (e.g. Jeffrey, 2004; Sawyer, 2004; Woods, 2004). Imaginative approaches, spontaneous reaction, making emotional connections, creating atmosphere and tone, and developing empathy through drama and role-play have been documented by Woods (2004) as amongst the key strategies employed by creative teachers. Earlier studies had established four core characteristics of creative teaching: making learning relevant to students; enabling them to take ownership of learning experiences; the passing back of control and the encouragement of innovatory action (Woods, 1990). Numerous other characteristics of creative teaching strategies have been evidenced and have been summarised in a survey by Jeffrey (2004), including: flexible structures, encouraging the taking of roles, considering emotions, using humour, creating

critical events, problematising, stimulating the imagination through narratives, encouraging play, developing team identities, and establishing a dynamic caring school ethos. Creative teachers, it is argued elsewhere, are expert in taking advantage of the unexpected to promote learning and are characterised by flair, vision, energy and organising powers (Woods, 2004). Flexibility and capitalising on the unexpected were two of the findings of my pilot study regarding teacher pedagogy in DG. It might be that in the main study some of the creative characteristics of teachers addressed in the above studies emerge as elements of teacher talk or as part of the enabling context for the establishment of a relationship between teacher talk and children's PT.

More recent theoretical works on the pedagogy of creativity are those by Cremin (2009) and Lin (2011). Cremin (2009) in drawing on an earlier study of creative practitioners in primary and secondary school with Barnes and Scoffham, proposed a three-dimensional model where creative practice is conceived of a product of teachers' personal qualities and the pedagogy and ethos developed in the class/school. The core elements of the teacher's creative practice, it is suggested, are curiosity and a questioning stance, seeking connection-making, profiling autonomy and ownership and fostering originality. On the other hand, Lin (2011) who focused only on pedagogy suggested an alternative three-dimensional model of creative pedagogy: creative teaching, teaching for creativity and creative learning, which she asserts operate in critical interplay. Lin (*ibid*), drawing upon the definitions afforded by the English NACCCE (1999) document, defines creative teaching as the teacher's use of innovative, imaginative strategies, while she considers teaching for creativity to be the identification and support of children's creative abilities. She defines creative learning as children's active engagement in learning through questioning, inquiring, experimenting, playing, imagining and collaborating.

The above studies opened paths for the empirical investigation of teachers' pedagogy for fostering creativity, an area towards which this study has been addressed.

2.1.2 Possibility thinking as a key driver of creativity

In this study I chose to work on the notion of possibility thinking since it is most closely aligned to my professional understandings of creativity. The term 'possibility thinking' (PT) was originally coined by Craft (2000) to represent a process of thinking leading to creative development. The notion of PT was initially related to the posing of the question 'what if?' together with 'as if' thinking and involved the shift from 'what is this?' to 'what might be this?'. Possibility thinkers, Craft (2000, 2002) argues, use imagination and combinational play in order to find ways to cope with problems trying out alternative possibilities and identifying questions for investigation. Craft offered a conceptual definition of PT (Craft, 2000) which has been tested and developed through empirical studies (Burnard *et al.*, 2006; Cremin *et al.*, 2006, 2013; Chappell *et al.*, 2008; Craft *et al.*, 2008; Craft, Cremin, Burnard, Dragovic and Chappell, 2012a, Craft, McConnon and Matthews, 2012b; Lin, 2010).

The empirical PT work to date has used qualitative methodology such as video recording, still images, field notes, video stimulated review (VSR) with teachers, interviews, reflective diaries, critical incident charting and learner artefacts (Craft, 2011). A naturalistic collaborative inquiry by Burnard *et al.* (2006) in England highlighted ways to identify the nature and characteristics of PT in classroom settings with 3-7 year olds. These researchers, working for 12 months in a co-participative study with teachers, claimed that the core features of PT were: posing questions, play, immersion, innovation, being imaginative, self-determination, risk-taking and intentionality/action (see Figure 1). However, clear

understandings of these features were not provided in this study; working definitions were not offered.

In the same year, Cremin *et al.* (2006) examining the same data set focused on pedagogy and its relationship to fostering PT. A playful classroom context was seen as an enabling factor. The pedagogical strategies that the team argued had been evidenced as crucial for the development of PT in classrooms included: ‘standing back, profiling learner agency and creating time and space’ (see Figure 1).



Figure 1: Pedagogy nurturing Possibility Thinking (Cremin *et al.*, 2006, p. 116)

Standing back, it is argued (Cremin *et al.*, 2006), fosters learners’ autonomy and provides students the opportunity to follow their own interests gaining agency in their learning. In this way it is posited teachers notice children’s actions, understand their thinking and build on this. Enriched space and ‘stretchy time’, it is claimed, encourages children’s motivation and involvement in the activity and their PT. Through working inductively and deductively, the team appeared both to be open to PT features as evidenced in the children’s engagement and sought to build upon Craft’s (2000) earlier conceptualisation of PT; the work also included a

focus on pedagogy and stressed the need for an enabling context, though did not offer explicit examples of this. What was not examined in detail was teachers' talk in relation to PT. This was however attended to rather more closely in the next PT study.

A subsequent case study, using two sites including one of the initial ones with the narrower focus of 5-7 year olds, was undertaken by the PT team (Chappell *et al.*, 2008); this provided a more in-depth analysis of the PT features exploring visual and verbal video data and focusing on teachers' and children's questioning. The findings supported the researchers' claim that question-posing and question-responding are driving features of young learners' PT. Question-posing was categorised according to modality (verbal and non-verbal forms), according to the purpose of the question (leading, service and follow-through) and according to the degree of possibility (narrow, moderate and broad). Question-responding (also verbal and non-verbal) was also categorised: testing, evaluating, rejecting, compensating, completing, repeating, accepting, undoing and predicting. Thus a taxonomy of questioning was developed. The teaching and learning situations in that study often showed a nuanced interplay of possibility broad to narrow questions in order to foster PT (Chappell *et al.*, 2008).

This study also reconceptualised the core features of PT (see Figure 2), as including: being imaginative, risk-taking and question-posing/responding remained as core components after the analysis of the findings. Play and immersion were, the research team asserted, better described as a context, action/intention and self-determination were considered as permeating through PT and innovation was claimed as a possible outcome of PT and thus, potentially, a condition for creative learning (*ibid*).

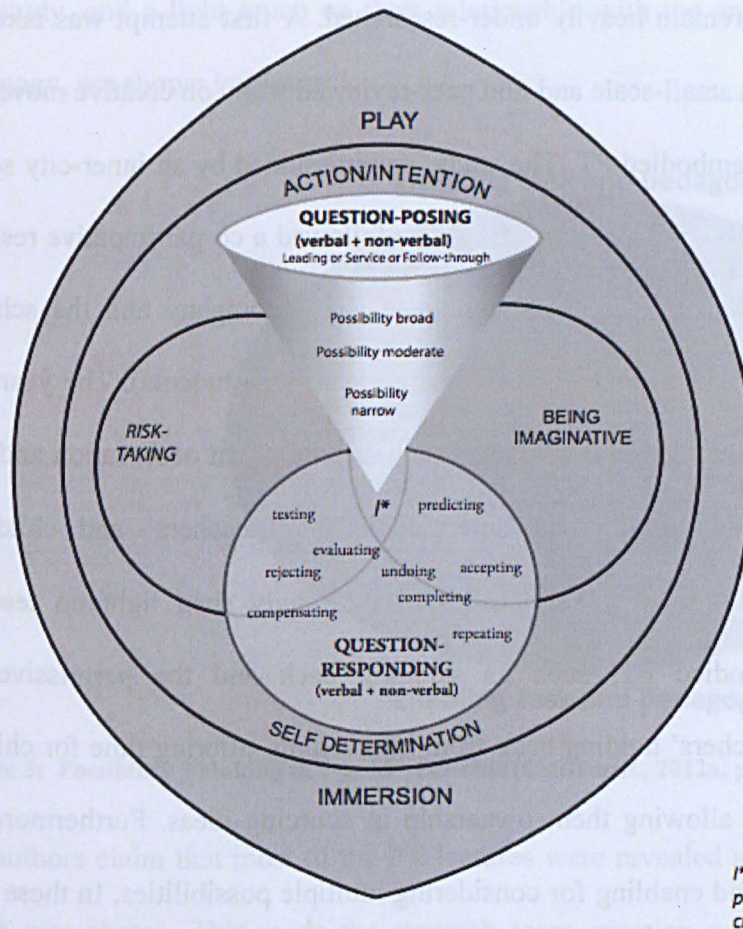


Figure 2: Taxonomy of question-posing and question-responding within Possibility Thinking (Chappell *et al.*, 2008, p.19)

The cone shape represents the inherent possibility in children's questions while the various question-responding categories are represented in the lower circle in no particular configuration. An area which was not fully illuminated in this paper is the non-verbal question-posing and responding on the part of children and teachers. However, this study looked for non-verbal communication for the first time in PT research and earmarked it for future research. My own study seeks to develop this further by examining teachers' body language and talk in the DG classroom (for more detail see section C.5).

The embodied aspects of PT remain heavily under-researched. A first attempt was taken by Craft and Chappell (2009) in a small-scale and non peer-reviewed study on creative movement, which mooted the concept of embodied PT. The study, commissioned by an inner-city school of around 320 children aged 7-11 in North East England, followed a co-participative research design involving the two external researchers-authors, a dance company and the school's teacher research team (four teachers) and student research team (12 students). The year long project involved multiple data collection instruments such as participant observation and field notes, digital images and video, reciprocal interviewing and teachers' and children's reflections in post-it or diary format. The findings of this study shed light on teaching strategies that enabled embodied PT, such as standing back and the permissive and encouraging environment: teachers' holding back from intervening, offering time for children to respond to challenges and allowing them ownership in sourcing ideas. Furthermore, the learning environment was found enabling for considering multiple possibilities. In these ways the children had the potential to make meaning physically, interpreting and creating movement and understanding related concepts and vocabulary. The conclusions of this study arguably contribute more to practice than to theory; in contrast, my study aims not only to inform practitioners but also academics, and seeks to offer empirical evidence on non-verbal communication in relation to PT, which is one aspect of embodiment.

A concern for the extent to which opportunities for fostering children's PT might be compromised in the upper end of the primary school due to issues of test performance led the English PT research team to turn their focus to older children (9-11 year olds) and the PT features and pedagogical strategies in science, mathematics and arts-based tasks in two new sites using naturalistic observations and a largely similar methodology as previously employed by the team (Craft *et al.*, 2012a). The findings concerning the PT features that were evident in

this study, and a light touch on their relationship with the enabling task and the associated pedagogy, are shown in Figure 3:

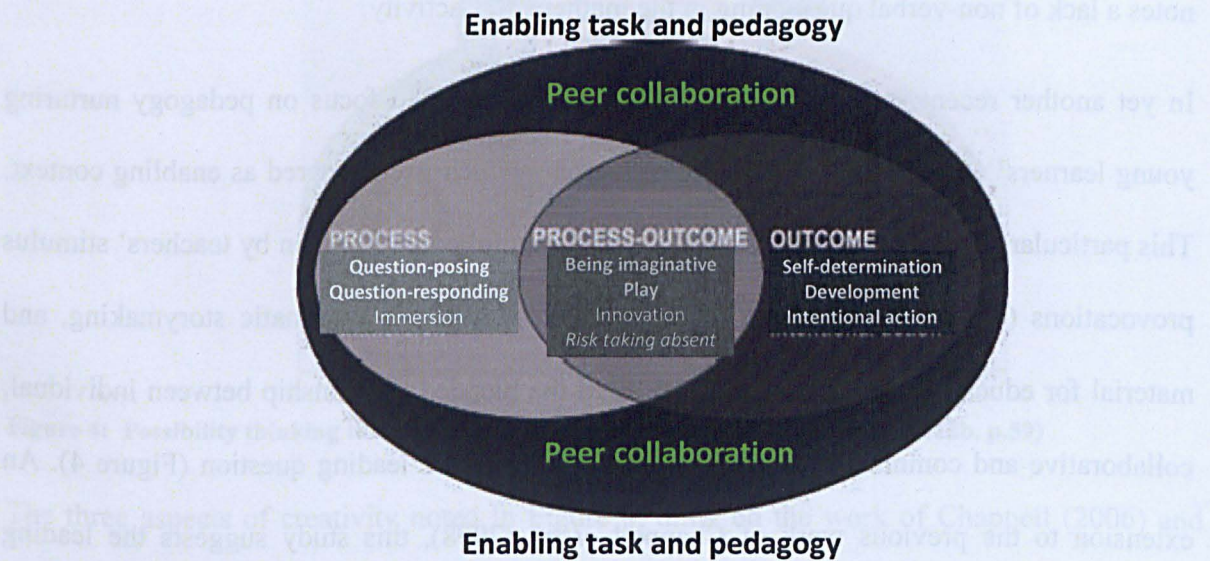


Figure 3: Possibility Thinking in 9-to 11-year-olds (Craft *et al.*, 2012a, p. 16)

The authors claim that most of the PT features were revealed as strong except for risk-taking which was absent. This made the research team question whether risk-taking is related to teacher control over the task and whether it is necessary to PT. It could be that the research approach did not manage to detect risk-taking. I think that the use of VSR with learners as well as teachers might have been able to provide a more detailed view of the PT features and that there is a need for further investigation of PT features, such as imagination and play, which appear to overlap in this study; their interplay remains unexamined. An additional feature revealed in both sites is that of peer collaboration as an enabling task and pedagogy (see Figure 3). However, the nature and dynamic of peer collaboration is not subjected to close scrutiny. The feature examined more closely was questioning, which was manifested distinctly in this study as in Chappell *et al.* (2008). The children's questions appeared to be possibility narrow; consequently the team made the assumption that the breadth of possibility is framed

by the teacher's framing of the tasks. Additionally, this work with 9-11 year olds presents some examples of non-verbal questioning (frowning, focusing, pointing, leaning), although it notes a lack of non-verbal questioning in the mathematics activity.

In yet another recent study, Craft *et al.* (2012b) attempted to focus on pedagogy nurturing young learners' (4 year olds) PT, in immersive play which is considered as enabling context. This particular study investigated a child-initiated playful context driven by teachers' stimulus provocations (e.g. imaginative narrative events, improvisational dramatic storymaking, and material for educating the senses) and identified the blended relationship between individual, collaborative and communal creativity under the role of the leading question (Figure 4). An extension to the previous work of Chappell *et al.* (2008), this study suggests the leading question is crucial in shaping the children's creative narrative. Both risk-taking and leading questions were exemplified and articulated in this study. Being imaginative was seen as imagining with adults because the teachers offered imaginative provocations to the young children in order to stimulate their imagination. In my study with older children I seek to identify whether various types of teacher talk such as imaginative provocations in the context of DG might influence children's imagination and/or other PT features.

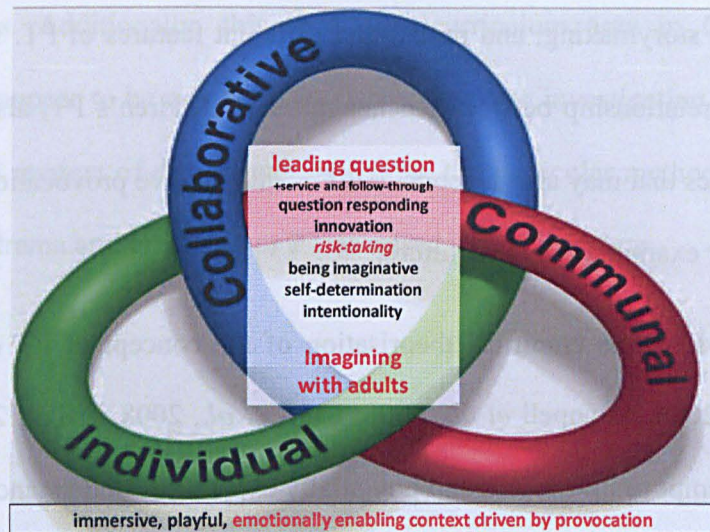


Figure 4: Possibility thinking through provocation-stimulated play (Craft *et al.*, 2012b, p.59)

The three aspects of creativity noted in Figure 4, draw on the work of Chappell (2006) and have been represented schematically by Greenwood *et al.* (2011, both cited in Craft *et al.*, 2012b). Based on empirical work in the context of dance, Chappell (2006) had conceptualised creativity as a mixture of individual ideas, shared ideas in collaborations and active group change. In this more recent PT study (Craft *et al.*, 2012b) the individual, collaborative and communal blend is considered as a new PT feature. Additionally, the emotionally supporting pedagogy, it is argued, involves provoking possibilities, allowing time and space for children's responses, being in the moment with the children, making interventions and mentoring in partnership. Developing previous work on PT pedagogy (Cremin *et al.*, 2006) this study supported the strategies of valuing learner agency and offering time and space and extended the strategies of standing back and enabling context. Teachers are seen as co-authors or 'meddlers-in-the-middle' (McWilliam, 2008, p.265) balancing standing back and stepping forward in their classroom. In this study it is argued they provided an emotionally enabling context encouraging learners and resourcing through provocations. What was not made clear was the relationship between certain kinds of provocation (e.g. imaginative narratives,

improvisational storymaking, and props) and different features of PT. In my study, I seek to investigate the relationship between teacher talk and children's PT, also raising issues about music and fabrics that may also be considered as imaginative provocations in the world of DG but need further examination in the future.

My study draws on the empirical theorisation of the concept of PT (Burnard *et al.*, 2006; Cremin *et al.*, 2006; Chappell *et al.*, 2008; Craft *et al.*, 2008, 2012a, 2012b; Lin, 2010) and involves an attempt to investigate and potentially expand the understandings established about the features and pedagogy of PT, working in the particular context of DG and investigating children aged 8-9 in Cyprus. To date, the empirical work on PT has used observations, interviews and video stimulated review (VSR) with teachers, field notes and digital images, sound files and journal entries. A methodological addition of my study is that it uses VSR with children too, in an attempt to acquire a more holistic and rounded view of the learning processes that take place. Regarding the PT features there are, as discussed earlier, gaps in the degree to which risk-taking has been documented as necessary to PT and concerning the nature and dynamic of peer collaboration in PT episodes. My study attempts to afford more evidence about these features. I also seek to explore teacher talk in more depth, potentially identifying additional or different aspects of such talk which may contribute to PT. In the published studies to date, teacher questioning has been foregrounded.

Overall, it is clear that research into PT is both ongoing and useful for documenting creativity in early years and primary education, in relation to both teaching and learning. However, the studies undertaken so far leave lacunae in the areas of teacher talk and body language in relation to PT. I have chosen to study PT in the DG context because it is an area closely aligned to my professional interests and improvisational drama is arguably an activity of

unlimited possibilities. Additionally, this is a new curriculum area in Cypriot primary education and would appear to be a potentially rich context for investigating PT. Let us now examine the historical context of drama internationally, the particular method of DG and the relationship between drama and creativity or PT as raised by the literature.

2.2 Drama in education

Drama is a new curriculum area in Cypriot primary education (CMEC, 2011b) and research around this area in Cypriot schools is needed in order to learn what might be done, how and for what purpose in relation to children's learning and creativity. For this reason I reviewed literature around international conceptions of drama in education and examined the various debates in the field. The method of Drama Game (DG) is one of the methods used in Cypriot education and one that is of particular interest to me, so I have examined this both theoretically and empirically. Finally in this chapter the relations between drama, creativity and PT are examined as researched to date, in order to identify gaps and issues to which my study may be able to make a contribution.

2.2.1 Conceptions of drama in education

In the history of drama teaching one issue which has divided exponents has been whether drama should be seen primarily as a subject in its own right or primarily as a teaching method (Bolton, 2001). The answer depends in part on the views of learning adopted. The social constructivist view of learning undertaken by this study (Vygotsky, 1978) considers learning as developing through social collaboration and drama could be seen as a social event because gesture and movement are the beginning modes of communication, since the time we are born (Wagner, 2002).

Drama as subject or method was not the only controversy. One of the key factors in the development of drama teaching in the twentieth century was the separation of 'drama' and 'theatre'. This distinction can be seen in relation to broader polarities: child-centred and subject-centred approaches. The distinction was most notably captured by Way (1967, p.2):

'...theatre is largely concerned with communication between actors and an audience; drama is largely concerned with experience by the participants.'

The leading figures for drama in education in the UK, Slade and Way, after the first half of the twentieth century, argued that the foundations of drama education lie in a powerful recognition of and a respect for the learning contained in play (Slade, 1954; Way, 1967). Sæbø (2009) asserted that Slade and Way in the UK and Ward in the USA, all believed in drama as a playful activity that contributes to a liberal personal development. They had probably been influenced by Dewey's conceptions of learning through experience and of the aesthetic nature of art (Taylor & Warner, 2006). Bolton (2001) argued that Slade was the first to attempt to bring natural play and self-expression into the classroom, while Way offered a new perspective adding life skills such as sensitivity and concentration in drama practice. For Bolton (2001), both Slade and Way ignored the conception of drama as a symbolic art form. He argued that drama must not concentrate on sensory but symbolic experiences, he stressed that drama is not self-expression of individual truths, but a form of group symbolism seeking universal truths about what humans share and the complexity of their relationships.

What both Slade and Way arguably lacked in their work was any examination of the role of the teacher as collaborator or facilitator. Heathcote along with Bolton (Heathcote & Bolton, 1995) profiled the significance of teachers taking roles in drama and saw this as part of the methods of 'Mantle of the Expert' and 'Teacher in-role'. O' Neill (1995), who archived much of Heathcote's material, introduced the term 'process drama', which will be discussed in the next section and will be compared to DG, the focus of this study. The process drama method was supplemented by the drama conventions approach by Neelands and Goode (2000), which combined the conception of drama as a representational art form with its pedagogical potential.

More recently Greenwood (2009), a New Zealand scholar, described drama in education as structured improvisation, with a number of fixed but changing structures. She used the metaphor of structured improvisation to discuss the history of drama education in her country, but also as a phrase characteristic of drama practice in schools. She highlighted the influence of Heathcote's conceptualisation of drama as a learning tool on the professional development of drama teachers in both primary and secondary education in New Zealand.

Having examined the historical background of the current conceptions regarding drama in education and reflected upon some debates in the field, it is clear more research is needed to shed light on the potential of drama as an art form and its application as a pedagogical medium. Evidence is also needed concerning the pedagogical role of the teacher in drama for promoting certain aspects of learning in schools. In my study I examine the role of the teacher in the DG method, in relation to the manifestation and fostering of children's PT as a core aspect of their creativity.

Another tension in drama education may derive from the blurring of boundaries between 'real life' and 'as if' situations in drama lessons. From my own professional experience in the DG method, I have come to perceive that the 'as if' situations undertaken in the DG process, may represent 'real life' situations of the participant children or, at least and while slipping into fantasy, what they would like their life to be. It is these 'as if' situations that, one might hypothesise, provide the opportunities for PT to develop. Let us now turn to examine the method of DG as developed in Greece and Cyprus.

2.2.2 The method of Drama Game

Drama Game (DG) is a term originating from my own translation of the Greek phrase *θεατρικό παιχνίδι*. I have chosen the words drama and game for two reasons: At first, I would like to distinguish this method from other educational applications of drama/theatre, which

have been employed internationally and named in a variety of terms (e.g. dramatic play, pretend play, process drama). Secondly, I searched the words theatre, drama, play and game in English dictionaries and decided that the best combination for communicating the meaning of the described method would be 'drama game'. In this term 'drama' refers to an action for deconstructing, understanding and reconstructing the internal and external world through verbal and bodily representations and 'game' refers to a challenging form of collaborative play which has structure and shared rules, but also freedom and spontaneity.

The method I call DG in English was firstly introduced in Greece by Kouretzis during the 70s (Kouretzis, 1991, 2008) and then in Cyprus by his student Prastitis in 1996. The latter was teaching the use of DG at the Faculty of Education in the University of Cyprus, where I first encountered this method. The work of Kouretzis is professional in nature and historically draws upon the work of the Austrian psychoanalyst Klein (1997) who is best known for her pioneer method of play therapy and also upon the influence of academics he had met in West Berlin in late 60s, such as Nickel (Kouretzis, 1991). Kouretzis specialised in theatre pedagogy and aesthetic education and has taught in Greek universities. He is also a teacher counsellor, leads children and adults workshops in many countries and has written many professional resources on DG (Kouretzis, 2008). He owns a theatre and DG school, in the website of which DG is referred as 'Playing-through-Theatre'.

Drama Game is, according to Kouretzis (1991, 2008), constituted by four phases: the first is the stage of release and sensitisation; the second is the stage of role reproduction and group forming; the third is that of the collective representation and improvisational act and the last is that of discussion and analysis. In the first phase the teacher stimulates children's curiosity framing an imaginary context for action, in order for, Kouretzis suggests, the participants to

get rid of personal worries, release tensions and be able to concentrate. This occurs through kinaesthetic action and vocal exercises under the teacher's guidance and rest on the floor accompanied by teacher's visualisation narrative. In the second phase the children try out various roles and then participate in randomly formed groups in order to work out a collective performance. The creative planning on the part of the children is often flexible, developing and adjusting plans during the course of action because it is almost impossible to anticipate all the opportunities that will arise in a group-improvisation. The third phase then comes to be the chance to present these performances to the other groups and finally during the fourth and last phase, all participants discuss and reflect on their experiences and feelings identifying potential problems, justifying decisions, revising plans and suggesting solutions.

The teacher-animateur may be a guide both verbally and non-verbally and sometimes may get in a role and play alongside the children developing the story; DG has no script or immediate audience and a range of techniques are employed within it such as kinaesthetic representation, improvisation, capitalisation on the unexpected, pantomime, grotesque, artistic and other audiovisual stimuli (Kouretzis, 2008). The improvisational nature of DG, it is argued in a professional text, enriches the imagination of the participants and hence helps them discover their abilities to create (Giannaris, 2001).

However, there has not been a concrete definition of DG in the literature yet; for the purposes of this study I am adopting the following working definition- DG is an educational improvisational activity during which participants create an imaginary world to playfully explore shared issues, meanings and relationships.

DG closely resembles process drama which is a term more widely used in the field of drama and one which is employed internationally by drama theorists and practitioners (Chan, 2009;

Cremin, 2007; Neelands & Goode, 2000; Sæbø, 2009; Schneider *et al.*, 2006; Schonmann, 2005; Taylor & Warner, 2006). Process drama is an approach developed in the 80s as pedagogy arguably different from other improvisational approaches to classroom drama, opening space for teachers to participate in drama for learning with their students (O' Neill, 1995). Process drama work involves teachers and children adopting roles and interacting together to create 'shared fictitious worlds, that materialise through the imaginations of both' (Cremin, 2007, p.118).

Both methods draw on the Vygotskian theories of thought, language and learning and have many similarities such as the absence of script and audience, the unpredictable nature, the use of narration and the variety of organisational settings (i.e. pairs, small groups, larger groups, whole class). The distinctions identified comparing the two methods concern the various conventions and the supportive tools (e.g. music, fabrics, and props). The teacher in process drama is not an external facilitator, a side coach, but functions as a 'co-artist' alongside his/her students, guiding the lesson from inside (Taylor & Warner, 2006). In DG the teacher does not always assume a role; he/she usually adopts a role when children ask for it (Kouretzis, 2008) or when it is necessary for the story to flow. As well as the convention of 'teacher in-role', some other conventions used in process drama include: 'hot seating, still images, interior monologues, decision alley, overhead conversations, thought tracking, flashback, role on the wall, forum theatre, and mantle of the expert' (Neelands & Goode, 2000). The conventions of process drama that I consider similar to those of DG are: improvisation, pantomime, visualisation, teacher as narrator, physical theatre, and small group play-making (Baldwin, 2008).

In DG music and cloths are essential resources while they are not deemed to be necessary by most proponents of process drama. According to a professional literature review on drama education (Giannaris 2001), it is noted that the music must not be too intense, though is included in an attempt to prompt movement, dance, imitation and good relation between the body and the space. The motivating role of music as enhancing learners' psychological involvement in theatrical contexts is also evidenced elsewhere (Miller, 1994, cited in Hardison & Sonchaeng, 2005).

Since this study investigates the manifestation of PT at the heart of creativity in the DG, we must now examine the connection between drama and creativity through the research literature and then drama in relation to PT.

2.2.3 Drama and creativity

Research in different cultural settings has shown links between drama and creativity (Hui & Lau, 2006; Neelands, 2011; Peter, 2009; Sæbø, 2009). National research in Norway, mainly based on classroom research, interviews and net-based questionnaires, revealed that drama in Norwegian schools is dominated by student-structured dramatisations, although teacher-structured improvised playing, process drama and teacher-in-role were found to be the most successful approaches for engaging students in creative learning (Sæbø, 2009). In this context creative learning is understood as the aesthetic learning process of cognitive and physical experience (thinking, speaking, writing, acting, and feeling) underpinned by a socio-constructivist conception of knowledge and learning. Sæbø suggests that teachers have to be creative themselves in order to provide children opportunities for creative learning in drama. This is related to a current contextual emphasis and development of drama teachers' artistic expression and dramaturgy in Norwegian teacher training.

Links between creativity, communication and emotion through drama are also noted in the UK with reference to socially challenged children (Peter, 2009). This author used case-studies to illustrate how playful drama activities manage to affectively engage children with autism, who have difficulties in communication, social interaction and rigidity of thought. Teacher narratives and challenging negotiations with children during drama, along with costumes, were seen to be powerful in developing the children's creative thinking; their ability to see more than one perspective and to understand others' thoughts and actions. This work raised the role of teachers' narratives and negotiations in drama and opened paths to explore the links between teachers' talk and children's creativity in my study.

Earlier, in a field-experimental study conducted by Hui and Lau (2006) in Hong Kong it was found that creative drama courses increase the creative performance of primary school children (creative thinking, problem-solving skills, and social skills). However this quantitative study did not offer sufficient depth to explain why drama processes enhance creativity. In my qualitative study I aim to get closer to the processes taking place in the DG and understand why and how they may foster children's PT as the engine of creativity.

In a recent theoretical paper, Neelands (2011), also from the UK, conceptualised drama as creative learning, explaining that improvisation is itself a creative activity because it requires teachers and learners to imagine themselves and the world differently, make spontaneous decisions and respond to the unexpected. Thus risk-taking, he suggests, is increased in drama and possibilities of roles, relationships and imaginary contexts widen. He also refers to the creative potential of the group in drama, the members of whom share experiences, and become able to co-construct their journeys into meaning and make changes in their imaginary world.

In sum, this brief reflective review of the literature on drama reveals some qualities found in drama and its pedagogy that can nurture children's creativity, including teacher narratives and modelling of creativity, negotiations amongst participants, costumes, use of the body and emotional drive, drama's improvisational nature and group structure. But how are these and other characteristics of drama related to children's PT? Let us now see what the research has indicated to date and examine areas worthy of more extensive consideration, some of which this study serves to document.

2.2.4 Drama and possibility thinking

Whilst in her early conceptualisation of possibility thinking Craft (2000) acknowledged the potential of drama to nurture PT in the primary curriculum, noting the scope of 'simulations, empathy work, storytelling, dramatic play, role-play, open-ended scenarios, improvisation, fantasy modelling and puppetry' (p.7), the relationship between these techniques and practices and PT has not been empirically examined. My study in the DG context serves to respond to this need.

However, one account of the relationship between drama and PT is afforded by Lin (2010) who studied the perspectives of 67 Taiwanese 11-12-year old students regarding the use of certain drama conventions (role on the wall, sculpting, still images, thought tracking, hot seating, teacher in-role, and conscience alley) for fostering PT. Diaries, response sheets and group interviews were used in order to collect the students' views concerning the pedagogy of drama in a series of ten-week drama lessons. Imagination and risk-taking were two of the PT features that were considered by the students as creative abilities, along with independent thinking (finding their own way to the solutions of the problems). The pedagogical strategies indicated by the students as creative were task-orientation, collaborative learning, teacher's

guidance (questioning, discussion, standing back) and teacher's ethos (encouragement, sense of humour, strictness); these highlight the important role of the teacher. Some of the limitations of this study include the absence of a definition for task-orientation and the fact that the author did not make connections between independent thinking and PT. Also, though Lin does show some drama elements that seemed to the students relevant to creative teaching in drama, such as playfulness, innovation, flexibility, space, and in-depth learning, her work is arguably dependent on students' understanding of creativity; she did not observe or analyse drama in action. Additionally, in-depth learning was not adequately defined. My study in Cyprus involves younger students (8-9 years old) and attempts to explore teacher talk and children's PT during DG in naturalistic classroom settings, not during an intervention programme as in Lin's inquiry. In addition, the focus of my study is on both teachers and learners, observing practice, not just perspectives.

In the next section, the importance of classroom talk in relation to creativity is examined and particularly types of teacher talk related to children's PT in previous studies.

2.3 Talk in education

This section examines research findings on classroom talk in relation to creativity and then focuses on teacher talk in relation to creativity and PT as included in the research questions of this study. Literature around teacher talk in drama is reviewed, as well as literature around teacher non-verbal communication. Talk is considered of considerable significance in education (Alexander, 2008) and its communicative function also makes it useful as a methodological tool in this research.

2.3.1 Classroom talk and creativity

Probably the principal means of communication among people is talk. According to Alexander (2008), talk helps to build a sense of self and relationships with other people. Under a social constructivist framework, language and the development of thought are inseparable in a social process; high-quality talk contributes to scaffold children's understanding from what is currently known to what has yet to be known (Alexander, 2008; Vygotsky, 1986). Neuroscientific research has shown that talk is necessary for building fibre connections between the cells of the brain developing the capacity for learning, memory, emotional response and language (Johnson, 2004, cited in Alexander, 2008). So the role of talk in learning is arguably significant and widely accepted, according to the body of research established in this area (e.g. Alexander, 2008; Mercer & Howe, 2012; Mercer & Littleton, 2007; Myhill, 2006; Wegerif, 2005, 2011). In this section, I will focus on research studies concerned with the relation between classroom talk and creativity in schools.

Reviewing the above literature, I found claims regarding links between talk and creative problem-solving. An extended classroom-based research conducted by Mercer and Littleton (2007) in computer-based English, citizenship, maths and science primary lessons suggested

that exploratory talk among teachers and children has considerable potential influence on reasoning and creative problem-solving. 'Exploratory talk' (Mercer and Littleton, 2007, p.58-59) is a term taken from the pioneering work on classroom talk by Barnes (1969, cited in Mercer and Littleton, 2007) and is defined and developed by this pair of researchers, it is posited as particularly educationally effective type of talk in which partners engage critically but constructively with each other's ideas. Statements and suggestions are offered for joint consideration, potential challenges are justified and alternative hypotheses are provided. Partners actively participate in the discussion, and all opinions are considered before decisions are jointly made. Building on Mercer's earlier studies, Mercer and Littleton (2007) claim that constructive criticism in small groups leads to joint decision-making and improves joint problem-solving. My study explores the problem-solving capacity of children as part of their PT in the collaborative activity of DG and investigates how teacher talk may relate to this and other creative capacities of children.

The results of the above study support Vygotsky's (1978, 1986) claim that language is the principal cultural and psychological tool for building knowledge. Cultural tools are considered the tools associated with the construction and sharing of knowledge amongst members of a community or society and psychological tools are considered as those internally oriented tools that transform the natural abilities and skills of the human to higher mental functions (Vygotsky, 1986). If we accept Vygotsky's claim that each of the child's higher mental function firstly appears between people (inter-psychological) and then on the individual level (intra-psychological), then talk is the main instrument that makes this transformation possible.

The findings of some research studies in primary education (Mercer *et al.*, 1999; Wegerif *et al.*, 1999; Rojas-Drummond *et al.*, 2003, all cited in Wegerif, 2005) support the claim that

children learn to use exploratory talk through dialogue. Wegerif (2005) also suggests that verbal creativity, such as word-play, humour and punning, opens a dialogic space in which new meanings are collaboratively constructed. In a more recent work that qualitatively analyses classroom episodes, Wegerif (2011) sketches out a dialogic theory of learning to think, arguing that meaning emerges from the interplay of different perspectives and that children's thinking is an aspect of their relationships and interactions. Children, he argues, can learn to justify their arguments and use exploratory talk through their teacher's own exploratory talk (questions and modelling of reasoning) in a dialogic space.

The notion of 'dialogic teaching', originated by Alexander, seeks to use the power of talk to stimulate and extend children's thinking and advance their understanding and learning (Alexander, 2008, p.37). He argues that dialogic teaching empowers children for lifelong learning and active citizenship as it requires interactions which encourage students to think in different ways, questions which invite much more than simple recall, justified answers which are followed up and built upon. He also suggests it includes feedback which leads thinking forward as well as encourages, and discussion with argumentation which promotes challenge rather than unquestionable acceptance of ideas.

In a more recent paper, Mercer and Howe (2012) discuss the educational functions of classroom talk and review related research inspired by a sociocultural perspective. The authors raise the issues of teacher questioning and reflective discussion amongst teacher and children, so that the children learn to reason. They also note the field has considered the role of open questions, extended time for children to contribute, modelling argumentation and self-regulation, as well as whole-class discussion. In this way the children, it is argued, will manage to reveal their thoughts and misunderstandings, justify their answers, reason and solve

problems in collaborative activities. Regarding the issue of modelling self-regulation, Myhill (2006) argued that teachers must provide children with the necessary accoutrements in order to develop independence in creative and other learning abilities. Drawing on a socio-constructivist perspective of learning, she claimed that teacher talk may scaffold children's meaning-making in a temporary supporting structure which should eventually be removed. Yet, having explored whole-class teaching episodes in England with children aged 6-11, she illustrated how certain types of teacher questions and other discourse, can variously support and impede children's learning. More detail on the findings of this particular study is given in the next sub-section, which considers studies focusing on teacher talk and its relation to aspects of creativity, manifested by both teachers and children.

2.3.2 Teacher talk and creativity

My study in primary classrooms and particularly in the collaborative context of DG focuses on the relationship between teacher talk and children's PT; both strands are analysed through the interactive talk taking place in the classroom. The working definition of teacher talk taken in this study is the verbal and non-verbal language which teachers use in DG, including for example questioning, feedback and other forms. The children's manifestation of PT is also explored through their talk and physical engagement (verbal and non-verbal behaviour). I will now examine research into teacher talk in relation to creativity and identify the gaps in the literature, to which my study seeks to respond.

As Cremin and Maybin (2013) assert in their recent review of the literature, there are very few studies which focus explicitly upon teacher talk in creative contexts. These authors refer to classroom creativity (children and teacher's) as manifested in their language, but also as fostered through language in 'a collective Third Space' (Gutiérrez, 2008, p.148). Children's

language creativity, they argue, can be nurtured through poetry, narratives, drama, digital technologies and generally playful and artful learning contexts. Regarding teachers' language creativity, no studies were found exploring their sense of themselves as oral language artists, tale tellers, performance poets or role players for example. Thus, my study seeks to start filling this research gap by exploring teacher talk in the creative drama context.

The notion of Third Space (Gutiérrez *et al.*, 1995, cited in Gutiérrez, 2008) was conceptualised as a transformative social context of development in the classroom, where teacher and student formal and informal scripts interact, creating the potential for a shift in the social organisation of learning and what counts as knowledge. For Gutiérrez, a collective Third Space encourages attention to the learning and development that happens in the movement across various temporal, spatial, and historical dimensions of an activity; they relate their concept with that of zone of proximal development (Vygotsky, 1978), imagining the Third Space as an interdependent ZPD amongst teacher and students. However, Gutiérrez (2008) worked with adults and not with primary children, unlike Myhill (2006) who, conducting a qualitative study in UK primary classrooms, categorised teacher's questions as factual, speculative, procedural/management and process questions. Myhill used classroom video-recording, structured observations, VSR with teachers, post hoc children interviews and narrative description of context. She concluded that although the teachers most often used factual questions with a predetermined answer, speculative questions (which invite opinions, hypotheses and imaginings and thus they are open) and process ones (which invite children to articulate their understanding and explain) are those related to higher order thinking such as reasoning and reflection. On the contrary, factual and closed questions seemed to Myhill to provide limited opportunities to the children to think 'leading pupils to a predetermined

destination' (p.39). This is a matter for concern if teachers are seeking to engage children creatively, although it is worth acknowledging that the relation between these kinds of questioning and creativity was, as assumed, not examined in Myhill's study.

Later, Alexander (2008), based on large-scale international qualitative research, concluded that questions that build on previous knowledge, questions that elicit children's understanding, open questions balanced with guidance, questions that prompt and challenge thinking and reasoning, and questions that combine the routine and the probing are all characteristics of dialogic teaching. Thus, he provided more evidence about teacher questioning as challenging children's thinking and reason, although he did not offer any explicit links between such teaching and children's creativity. However, he examined some of the dilemmas around teacher talk, such as dualities between bidding and nomination, questioning and telling and habitual praise and meaningful feedback.

Another qualitative research study using audio-recordings, vignettes of lessons and follow-up interviews with teachers, shed light on feedback as an important aspect of teacher talk in cooperative learning contexts (Gillies and Boyle, 2008). Except for challenging cognitive and meta-cognitive questions, open questions and prompts, teachers in this study seemed to validate and acknowledge students' efforts; feedback was affirmative and characterised by encouragement and praise, using friendly, personal language and emphasising personal improvement rather than competition. This study was conducted in secondary education, but Gillies & Khan (2008) undertook a large-scale quantitative study in Australian primary education. This comparative study focused on the effectiveness of training teachers to implement cooperative strategies and use specific communication skills, in comparison to teachers who implemented cooperative approaches or small-group approaches only. They

found the first condition more effective and argue that challenging and mediating behaviours on the part of the teachers, such as tentative questions, prompting, paraphrasing, guidelines and praise, are positively related to children's reasoning, problem-solving and meta-cognitive thinking.

My study investigates whether and how teacher talk relates to children's PT in Cypriot primary education, providing evidence from another context about teacher talk in relation to reasoning, problem-solving and other features of children's PT. It seeks to afford detailed evidence about this relationship using qualitative methods that allow in-depth exploration of the interactions and the context. I will now consider what the research on PT pedagogy has offered in relation to teacher talk.

2.3.3 Teacher talk and pedagogical strategies for PT

Evidence from a collaborative enquiry in UK, as analysed earlier in the PT section, has shown that talk is crucial for advancing children's PT (Chappell *et al.*, 2008). Question-posing (verbal and non-verbal) on the part of either the teacher or the children seemed to be the dominant feature driving the young learners' PT process. Teachers mainly used focused leading questions in order to frame the PT that ensued, while at the same time they were flexibly offering time and space to the children to imagine alternatives, generate new ideas and possibilities and hence lead their own learning. In this way the teachers seemed attentive and responsive to the children's needs and interests. Drawing on previous findings about the pedagogy of PT (Cremin *et al.*, 2006), the authors argued that this responsive intervention on the part of the teacher seemed to be balanced with standing back, sharing the space with the children.

In a more recent study on PT pedagogy, as discussed earlier in the PT section, the research team (Craft *et al.*, 2012b), investigating a child-initiated playful context, identified the role of the teachers' stimulus provocations (e.g. imaginative narrative events, improvisational dramatic storymaking, and material for educating the senses) and also the crucial role of the leading question or narrative in shaping the children's creative narrative. This study offered insights around the balance between standing back and stepping forward and thus between child- and adult-initiated play. This balance reflects McWilliam's (2008, p. 265) teacher as 'meddler in the middle', who has a role to play in moving the children's thinking forward by using narratives and appropriate leading questions.

My study is part of the ongoing PT research and attempts to explore which specific types of teacher talk advance children's PT in the DG, affording in this way new insights on PT and its attendant pedagogy.

2.3.4 Teacher talk in drama and DG

The DG method is seen as a pedagogical strategy and a collaborative activity that aims for the recreation and communication of the participants through spontaneity and imagination; language and body expression (Sextou, 1998). However, the nature and characteristics of teacher talk during the DG have not been documented to date. The current study seeks to investigate this gap in the literature and examine whether and in what ways the teacher talk during the DG activity relates to children's PT.

The literature search revealed a more general gap in researching teacher talk in drama. In an attempt to find related studies, I read Tam's (2010) research study in Hong Kong, which suggested that Bakhtin's carnival theory as epistemology can illuminate drama pedagogy- laughter, noise, jokes, rhymes, frolic and popular literacies commonly appear in classrooms

where teachers apply drama pedagogy. This classroom discourse, Tam argues, offers a model to help us re-learn the unpredictability, plurality and openness to the production and distribution of knowledge that drama pedagogy can engender. Carnival theory can be used, she/he suggests, to understand free contact, mass movement, buzz of excitement and cheering, boundless bodies, imagination activated and authority resisted in the ongoing learning space of drama classrooms. Yet, this study did not offer explicit insights around teacher talk, talk that may relate for example to a rupture of power in the pedagogical spectrum. However, Tam does comment upon the role of body in drama classrooms, which is also considered in my own study.

Since bodily and more generally non-verbal communication accompanies talk and is likely to play an important role as a mode of meaning-making in drama, I now turn to research which examines teacher non-verbal communication and body language in particular.

2.3.5 Teacher non-verbal communication

There are numerous researchers that have studied human non-verbal behaviour as a mode of communication. For example, the five primary functions of non-verbal behaviour according to Argyle (1988) are:

- *Expression of Emotion* — emotions are expressed mainly through the face, body, and voice.
- *Communication of Interpersonal Attitudes* — the establishment and maintenance of relationships is often done through non-verbal signals (tone of voice, gaze, touch, etc.).
- *Accompany and Support Speech* — vocalisation and non-verbal behaviors are synchronised with speech in conversation (nodding one's head or using phrases like "uh-huh" when another is talking).

- *Self-Presentation* — presenting oneself to another through non-verbal attributes like appearance.
- *Rituals* — the use of greetings, handshakes or other rituals.

There are also studies that approach the role of the body in communication developing the notion of embodiment. Amongst multiple approaches to embodiment, the literature review reveals two main approaches which align closely with the theoretical underpinnings of my study: the philosophical and the psychological. The philosophical approach mainly based on Dewey's, Foucault's and Merleau-Ponty's ideas considers the body as the source of all spontaneity and truth and body-mind as oneness of the self (Arnold, 2005; Cunningham, 2008; Feldenkrais, 1972, 1985; Wright, 2000). The psychological approach of embodiment or embodied cognition approach (EC) follows the line that body as a social entity and action are developing cognition, proposing a more dualistic sense of body and mind (Castañer, Camerino, Anguera & Jonsson, 2011; Claxton, 2006, 2012). Based on the above literature, I have understood embodiment as the expression of thoughts, feelings and sensations through body motion.

Embodiment is an area of study that will possibly make future territory in PT research. I visited two such studies for understanding the connection between talk and embodied knowing, although I delimit my study by looking at non-verbal communication and body language in particular. Wright (2000) compared the language of a physical education lesson and a Feldenkrais movement class in Australia and, drawing on Foucault's ideas that talk constitutes particular forms of embodied selves, explored how cultural meanings about bodies, selves and physical activity were taken up in these two sites. He examined how particular discourses determined the way the bodies acted in space and in relation to other bodies. He claims that the teacher, concentrating on skill acquisition in the physical education lesson and referring to

the body parts as grammatical objects, seems to have considered the body as an object breaking it down into its component parts. Also, the use of 'modal auxiliaries such as have to, must, got to, should' (p.43) and closed questions seem to have limited the opportunities for empowerment and pleasure on the part of the children.

In contrast, the transcription of a Feldenkrais class in a university creative arts course showed that the teacher encouraged the kinaesthetic experience of the 'connected body' (p.44) inviting the participants to consider the relationships among the different body parts. The aims of the Feldenkrais method are 'body awareness', to free up the body by abandoning old habits of movement and to be self-reflective about learning with and through the body (Feldenkrais, 1972, 1985; Wright, 2000). In order to achieve these aims, the teacher in the Feldenkrais class used prompts for movement such as 'lay on the floor', prompts for reflection such as 'take notice', 'draw your attention to' and 'visualise', which refuse the separation of mind and body and provoke processes of consciousness, and finally questions about how and why the body moves as it does to guide the kinaesthetic exploration of the body. These types of talk, it is argued, serve to set up contexts for natural movements rather than skills and emphasise the spontaneity of the body asking how would the body respond rather than what should one do. However, Wright concluded that the teachers in both sites were those regulating what can be done, how it can be done and where; he suggested the investigation of other movement practices that provide possibilities for self-determination, collaborative problem-solving and enjoyment during the production of embodied selves. My study seeks to fill this particular gap examining how teacher talk and body language relate to children's PT, which includes self-determination and problem-solving, in the collaborative context and movement practice of DG, opening the door to conceptions of embodied PT.

Since there is a dearth of studies in drama education concerning teacher non-verbal communication, I again turned to physical education. In a recent study of expert and novice physical education teachers, I found the categorisation of their communication into kinesic behaviour (gestures and postures) and proxemic behaviour (the use of space) useful, although the authors name these behaviours paraverbal instead of non-verbal (Castañer *et al.*, 2011). The authors claimed that very little educational research has been concerned with the role of gestures in teaching and learning although they argue the gestural discourse envelops the verbal discourse. The findings of this quantitative study indicated that novice teachers used a greater number of gestures compared to the experts and did not always make effective use of the space. Additionally, their gestures did not make full advantage of all communicative possibilities. Another important finding was the descriptive quality of some gestures accompanying the teacher's instructions or questions. In my study, I analyse the kinesic and proxemic behaviour of two teachers (male and female) in the DG method, explore the relationship between these kinds of non-verbal behaviour and certain types of talk (verbal behaviour), and then investigate how these communicative behaviours relate to children's PT. I have chosen to delimit my study very specifically to teacher body language (kinesics and proxemics), which has a psychological framing simpler than the more philosophical framing of the embodiment area and thus is would be more clearly definable.

Following this critical review of the insights, understandings and gaps in the literature around creativity, drama and talk in primary education, I move to describe and explain the methodology of my research study in the next chapter.

3 Methodology

Initially, the methodology chapter presents the research approaches of this study and I explain and justify my epistemological and ontological position. Then I present a summary of the initial pilot study and finally focus on the main study. Particularly, I explain the sampling procedures, the data collection methods and raise issues of reliability, trustworthiness, quality and rigour. Some other ethical considerations are discussed and finally I describe in some detail the analytic process.

3.1 Research approaches

The choice of certain methodological approaches relates to, or is underpinned by, my perceptions about learning. I found the social constructivist framework useful for this study because it emphasises the collaborative nature of much learning as a process of classroom interaction. Vygotsky (1978) was a leading figure of social constructivism and stressed the importance of social context for cognitive development. He argued that children can, with help from adults or more capable peers, understand concepts that they cannot understand on their own, in their zone of proximal development (ZPD). From this point of view, individuals develop through interactions with the world and these interactions inform and mediate mental processes. His work highlighted the significance of language, in particular, as a psychological mediating tool in human activity. For him, language mediates social and cognitive development, and is also mediated through it. The process of transforming knowledge through interaction is a central principle in Vygotsky's theory of human development (Vygotsky, 1978); my study investigates how children's PT is related to teacher talk and body language

through their interaction in the classroom. The social constructivist framework of the study has also an impact on methodology. Based on the belief that thinking and learning can be developed through social interaction I decided to analyse teachers and children's talk and body language in social interaction transcribing digital videos of real-time, naturalistic classroom observations.

The constructivist epistemology undertaken in this study assumes that knowledge is constructed by and between people and relates to the relativist ontological position that reality is accessible through multiple interpretations (Denzin & Lincoln, 2003). I thus took into consideration that I needed to let the readers of my thesis formulate their opinions based upon my interpretation of the data. In order to be transparent about the reasons for my interpretation, I analyse my role and position as a practitioner researcher and identify how these may have affected my interaction with participants as well as my interpretation of data. In sub-sections 3.3.4 and 3.3.5, I then explain some strategies I undertook to minimise bias raised from my role.

Based on the above theoretical paradigm, the study therefore followed a qualitative research paradigm because it seeks to adopt an exploratory orientation in order to get a detailed picture of the DG in primary education. Qualitative research is considered a situated activity which consists of interpretive practices that transform the world into a series of representations giving emphasis on processes and meanings (Denzin & Lincoln, 2003); it focuses on 'actual practice in situ, looking at how social interactions are routinely enacted' (*ibid*, p. 359). The research questions on children's PT and teacher talk in the DG cannot be answered by quantitative data, as they would fail to explore behaviours, relationships and the conditions

under which learning takes place. Quantitative data could not offer information about the subtleties of the occurring interaction and the PT nuances that this study aims to discern.

I used a naturalistic inquiry approach in order to produce a detailed description of the DG lessons in their natural setting; I did not seek to control the conditions of the lessons. Another reason for using naturalistic inquiry was that PT has been documented in the PT studies undertaken to date using naturalistic inquiry approaches (Burnard *et al.*, 2006; Cremin *et al.*, 2006; Chappell *et al.*, 2008; Craft *et al.*, 2008, 2012a, 2012b).

In order to understand the unique instances and dynamic relationship of teaching and learning in the DG in depth, I adopted a case-study approach. This approach is appropriate to provide an in-depth account of events, relationships, experiences or processes (Denscombe, 2003). Case studies can provide unique examples of human interactions in real situations (Burgess *et al.*, 2006). In this particular study I investigated six DG lessons, considered as six different cases, in four different classrooms taught by two teachers, and as a result adopted a multi-case study approach. It has been argued that case study should be seen and used as providing a point of reference for the development of educational practice, reporting experiences which invite judgment and critical appraisal (Stenhouse, 1985 cited in Walker, 2002). This is particularly appropriate for this study, which aims to understand how teacher language may relate to children's PT while practicing the DG method.

3.2 The Pilot Study

During an initial stage of this research, a pilot case study was undertaken during November 2009; this enabled me trial the research design and data collection and interrogate the data in order to refine the research questions and reframe the main study.

The pilot study attempted to engage with three research questions:

- a) What are the characteristics of children's talk in the DG?
- b) What are the characteristics of children's PT in the DG?
- c) What pedagogical elements are dominant in fostering children's talk and PT in the DG?

The sample of the pilot study was a teacher and two classes of 8-9 year old children in an urban public primary school in Cyprus. The sampling procedure for the teacher had a purposeful character since I needed a teacher familiar with the DG method who worked in public schools; I selected the teacher 'on the basis of suitability' (Denscombe, 2003, p.33). In terms of the children, the sampling procedures were employed randomly in order to identify two girls and two boys out of around 20 children in each class.

The methods used for the pilot data collection were: video-recorded classroom observation using two camcorders (one covering the whole class, the other focusing on the focus children, 20 minutes each in an 80-minute lesson), semi-structured interviews of the teacher before and after the two lessons and interview with the four focus children after each lesson supported by video stimulated review (VSR). The VSR session actually happened only with the second class, due to technical problems encountered in the first case. Focusing on only one child each time in the first case showed that much information was missing, so variations in the procedures were tried the second time. Initially I had directed the camera on every student who started to talk; this was problematic as during the third phase of DG, children worked in

groups. It was impossible to capture the conversations of four groups simultaneously, so I began to concentrate on one group and then moved to another. VSR with the teacher took place to cross-check findings from both lessons; she was asked to choose critical moments for the discussion; and chose episodes she found strange, unusual and nontrivial. The VSR method was useful for providing explanations about behaviour and specifying critical episodes for detailed analysis. Then I transcribed all the above data (whole-lesson videos and interviews/VSR sessions) but only analysed the critical episodes (two from each lesson), chosen by the teacher and the children, and the interviews/VSR sessions.

During the pilot data analysis I aimed at first to identify open and axial codes in each of the three core strands of the research: children's talk, children's PT and teacher pedagogy. In relation to pedagogy I chose to work deductively with the codes from previous PT empirical work, i.e. standing back, creating time and space, profiling learner agency and providing an enabling context (Cremin *et al.*, 2006). After inductive analysis, I added teacher talk per se proposing subcategories to further describe the data. I used a semi-structured schedule which included the definitions of the codes/themes from the related literature and my own interpretations. Themes were defined in a way to 'reflect the meaning of the retrieved words or phrases' by my subjectivist interpretations (Yin, 2009, p.128). For example, if the teacher had posed a question to the children, I tried to identify if it was open, further or follow-up question and noted down in red colour 'pedagogy-talk-open question'. Concerning children's talk I tried to identify if they gave reasons for their answers and then noted down in blue 'talk-exploratory-reasoning'. Finally concerning PT, if children's talk and/or actions illustrated that they were engaged in play I noted down in green 'PT-play'.

In a search for possible patterns and connections among the various data some first explanations regarding the initial research questions -children's talk, children's PT and teacher pedagogy during the DG- emerged in combination with how and why questions for further empirical work. I will now discuss the main findings regarding children's talk, children's PT and teacher pedagogy that emerged from the pilot.

Children in the critical episodes mainly used the following types of talk:

- a) *Exploratory talk*: they justified their answers and used reasoning.

In the first lesson, some children made much use of reasoning while they were discussing potential dangers for the fish with the teacher during the second DG phase. For example:

Tasos: The fishermen.

Teacher: What do the fishermen do?

Mike: While they are seining we may tangle into their nets!

Teacher: Yes! What about you, Andrea?

Andrea: Once the sailors throw the anchor, there may be a fish which may be hurt.

The children seemed to have clear images for fishing and sailing in their minds in order to justify their answers, although some needed a further question by the teacher in order to explain their reasons. More use of exploratory talk was evident during the last phase of DG in the second lesson, as demonstrated in the following exemplar:

Teacher (T): First of all, I would ask you to tell your feelings while you were in the ocean.

Jonathan: We were feeling joyful because it was calm, but one day people came and polluted the sea.

T: Yea...next!

Louisa: At the beginning our ocean was nice... There was nothing bothering us but in the end, due to the rubbish that polluted the sea, I felt sorrow for the ocean!

T: Mary? (*she is playing shyly with her cloth*) Speak loudly Mary! What have you felt?

Mary: I was feeling joy..!

T: Bravo! You felt joy then!

Thomas: I was feeling joy until humans came and started to fish...

The teacher in the VSR session explained the aims of the final phase of DG, as the time when children evaluate actions, explain reasons, justify their preferences/decisions and express feelings, and these aims accord with the definition given of exploratory talk. This type of talk may relate to that identified by Mercer (1995, cited in Mercer & Littleton, 2007), although he investigated such talk in different lesson contexts.

- b) *Creative talk*: they used unusual vocabulary during the brainstorming of the second phase and the group improvisations of the third. Unusual vocabulary during brainstorming may connect to ‘spontaneous verbal creativity’ (Wegerif, 2005).

The brainstorming activity seemed to enhance the expression of verbal creativity on the part of the children, as illustrated in the following example:

Teacher (T): Rubbish! Bravo Socrates!

The beauty of the sea became a dump. Could some of you make the dump for a minute and then go back to your rocks?

Costas: Ole!

(stands up and quickly moves wildly to the centre of the hall. Other children follow and throw their fabrics on the floor)

T: Harry up to your rocks! The place is full of rubbish (*slowing down*). Look at them! What can you see now?

Paul: Soft drinks.

T: Soft drinks tins! What else?

Rose: Bad food.

Kalia: Umm, old things.

T: Old things thrown in the sea. Like what?

Sotiris: Like a brazier.

T: A brazier...has been thrown in the sea.

Mike: Doors!

T: Old doors which people didn't know where to put so they threw them in the sea...

Verbal creativity may perhaps be documented in this example in the use of unusual words such as 'brazier' and 'doors' while talking about rubbish in the sea. Other creative elements in their talk such as humour and exaggeration were manifested during group improvisations, as stated by the teacher in the VSR:

Humour was used by some of the children such as the boy who assumed the role of an old shark and another who pretended the super-hero. The use of mythical features and magical antidotes might be considered as exaggerative.

The drama context seemed to take children to imaginary worlds or magical worlds from myths /fairytale; this may be one of the reasons why children created their own novel or unusual roles and imaginary props. These findings also connect to the notion of PT, which follows.

- c) *Other talk*: they expressed their impressions, feelings, preferences and wishes especially during the fourth phase of DG when they reviewed their group improvisations and the whole activity. Some might call this type of talk 'expressive', although such talk may be inherent in exploratory or creative talk.

The features of PT mostly apparent in the four episodes chosen by the participants were:

- a) *Being imaginative*: children gave unusual answers and engaged in an 'as if' magical or mythical world assuming imaginary roles.

An illustrative exemplar from the video transcript and three short quotes from the interview data evidence the children's imaginative engagement during DG. In the first lesson, some girls described their group improvisation in the final phase of the DG:

Kalia: We were mermaids and they were throwing oil-slicks near us (...) and then some other mermaids went to find the antidote.

Teacher (T): The what?

Kalia: The antidote!

T: What was the antidote?

Maria: The other mermaids were on the look in the sea to find something to help us.

T: And what did they discover?

Vicky: A magical plant placed deep into the sea!

The 'as if' space of mermaids seemed to engage children in an attempt to find a solution for the problem of pollution; they used their imaginations and creatively thought of magical antidotes as the solution to their problem. The above exemplar of 'being imaginative' may also be an example of self-determination in their problem solving. Several of the children in the focus group interview spontaneously stated that they had used their imagination: 'I liked that we used our imagination to think!', 'I imagined that no one could ever find that role' and '...We use freely our imagination!'

b) Self-determination: they expressed confidence to be involved in various self-directed activities during DG making their own choices and decisions.

c) Innovation: they used unusual words and invented their unusual roles.

The interview and VSR data revealed some aspects of innovation on the part of the children, in the sense of producing an unusual idea manifested in their talk (see creative talk above). A

student from the second lesson stated 'we were ingenious because if everything was the same the result wouldn't be nice' and the teacher observed that 'some children invented their own unusual roles, such as the old shark and the gay king'.

d) *Playfulness*: they improvised in an 'as if' context encountering and solving problems.

The context of imaginative play in DG seemed to be a necessary condition for PT in children's creative learning. In an example from the second lesson, some girls prompted by their teacher played with a new possibility:

(Girls are tying up their fabrics on their feet...)

Girls: Help! Help! Help! We have been tangled in fishnets... help us!

Teacher (T): And then? You will stay tangled or will you escape? What are you going to do?

Mary: We are going to escape!

(the girls are untying their fabrics and running away)

Playfulness was evident most of the time during the two lessons, not only during the group performances but also during the first two phases where children explored issues and assumed roles. The children's interview data revealed that they too perceived they were playing: 'I like it because we play' and 'it is not tiring at all because we play'.

Questioning and risk-taking were documented to a lesser extent in the four critical episodes. Immersion and intentional action were also terms that at the time I did not fully understand and did not analyse in any depth, though arguably DG is an active, playful and immersive method.

Considering teacher pedagogy, the particular teacher mainly used the following pedagogical methods that were identified and affirmed in and through analysis of the video extracts, the

interviews and the VSR sessions. The deductive analytic themes, based on the findings from Cremin *et al.* (2006), included:

- a) *Standing back*: there were times when the teacher was not talking but looking and listening to the children's contributions.
- b) *Creating space and time*: she offered children the opportunity to use a three-dimensional interactive and play-based environment and also more time to think and act in it.

The teacher often seemed to create space for the children to gain agency, especially during group improvisations. In the first lesson, there were two other moments illustrative of this creation of space and time:

'The beauty of the sea became a dump. Could some of you make the dump for a minute and then go back to your rocks?'

'Could some of you pretend a ship that pollutes the sea?'

- c) *Profiling learner agency*: the teacher let the children lead the development of the lesson in many cases and have in this way agency of their learning.
- d) *Providing enabling context*: the playful context of the lesson and the use of music and props (coloured fabrics) were to support children's explorations.

The teacher's body language was relaxed and supportive; this may have helped children share ideas. The use of music seemed to enhance the immersion of the children in the activity, whilst the tambourine possibly provoked fear and suspense as seen in the video clips. For example, the teacher before conducting the two lessons claimed that:

'The voice of a teacher must be theatrical and inspiring as well as her body language'

'The activities of the first phase are of great importance for the children in order to relax, be released and feel like getting in a trusting environment'

As well as confirming the previously identified PT pedagogical themes, additional inductive themes around teacher pedagogy emerged from the pilot study, these were:

- a) *Flexibility*: the teacher took children's contributions into consideration for the development of the lesson.
- b) *Group work*: the teacher provided the opportunity for children to engage in group work participating in small randomly-formed groups.
- c) *Narration*: the teacher narrated an improvised story in order to build the imaginative context and let the children develop this.

During the first phase of the DG, in both lessons, the teacher was mainly narrating and children were miming. However, these phases were not chosen by the participants as critical episodes for analysis. An example from the second phase of the first lesson shows the teacher's narration, used to present a forthcoming danger in the ocean:

Teacher: The eels, the octopuses, the mermaids and the kings of the ocean... all have been hidden.

The ocean has been uninhabited! (*complete silence in the room*) Where are they? Where is the previous beauty? A big danger has come to disturb their life! What could be that danger? (*many children are raising hands*)

What danger did you feel John?

John: A shark!

It appeared possible that the teacher's narration and the use of rhetorical questions enhanced children's concentration and perhaps fostered their imagination.

- d) *Instructions*: the teacher was giving instructions to the children for every new task.

- e) *Question-posing*: the teacher posed many questions to the children, mainly open.

The teacher often posed questions to the children, most were 'open' to every possible answer; others supported a previous open question and were defined as 'further' and some were 'follow-up' questions. For example:

'What could be that danger?' (open)

'So the sea has been filled out with what, now?' (further)

'So the shipwrecks! Could they be a danger for you?' (follow-up)

'What are you going to do now?' (open)

'You will stay tangled or will you escape? What are you going to do?' (further)

'And how did the rubbish bother you?' (follow-up)

- f) *Support and praise*: the teacher was supporting the children's participation encouraging them through both her talk and body language.

The teacher seemed to support the children through her use of praise such as 'Good!' or 'Bravo!'; this was evident in both lessons, almost after every contribution. Another example of teacher support was the following:

Teacher (T): Other dangers you have seen... There have been more.

George: Umm, I forgot.

T: You forgot. Never mind!

In the interview data from the children in the second lesson, a girl noted about her teacher: 'She was encouraging us even when we were not doing something well!'

- g) *Modelling*: the teacher was demonstrating some role-playing with words or actions and modelled reasoning in many cases.

For example, the teacher often modelled reasoning. The following extract is an episode from the first lesson which illustrates this:

Teacher(T) :What could be that danger? (*many children are raising hands*)

What danger did you feel John?

John: A shark!

T: A shark that didn't respect the other fish! Other danger?

Elias: A swordfish with its pointy... (*shows with hands*)

T: A swordfish ready to penetrate them. Something else?

Christina: An octopus.

T: An octopus that may enclose them in its tentacles.

Vicky: A big fish!

T: A big fish that may squish them!

The above pilot findings were used as the basis of the analytic framework of the main study and led to the development of my conceptual framework regarding children's PT, teacher talk and the enabling context of teaching and learning in the DG. The pilot study also led to some methodological developments for the main study.

The research questions were revised in order to afford increased depth and detail. Particularly, I removed the question on the characteristics of children's talk, in order to be able to focus on their PT through their talk and non-verbal behaviour. In relation to the teacher pedagogy, which seemed a large area of study, I decided to focus on types of teacher talk and body language; the pilot study had revealed possible sub-categories that appeared to relate to

children's PT. These included: narration, question-posing and responding (e.g. open/possibility broad questions, how and why questions, accepting and celebrating responses), instructions and modelling, support and praise. The new research questions are presented in the following section which focuses on the main study.

The interview/VSR protocols were also revised to enrich the evidence for the new research questions. The sample of children that would participate in the interviews after the lesson was not to be focused upon during video-recording, because of the difficulties encountered in following four children simultaneously in DG. I decided to video-record all the children in the classroom using the stable camera, and use the mobile camera for the teacher. I also learnt how to avoid prompting children in the interview and how to observe and video less obtrusively so that the observation remained naturalistic. Additionally, I noted the value of close transcription and the challenge of transcribing in Cypriot and then translating into English.

The process of undertaking a pilot study was useful, because all deficiencies mentioned above were used as research lessons for the subsequent main study. The findings from this pilot study were published at an International Congress for School Effectiveness and Improvement held in Cyprus during January 2011 (Aristeidou, 2011).

3.3 The Main Study

In the main study I focused on the following research questions:

- 1) *What features of children's PT are evident during the DG?*
- 2) *What types of teacher talk are evident during the DG? and*
- 3) *What is the relationship between teacher talk and children's PT during the DG?*

3.3.1 Sample and sampling procedures

The sample of the main study was two teachers and four classes of 8-9 year old children (third grade) in two urban public primary schools in Cyprus.

The sampling procedure for the teachers was 'purposive' in nature (Denscombe, 2003, p.15) since the study needed primary teachers who are familiar with the DG and work in public schools. Only a few teachers fulfil these criteria since the method is not widely used. I selected the participant teachers 'on the basis of suitability' (*ibid*, p.33): the participant teacher has been using DG for 15 years and I, as a practitioner researcher, have been using it for 10 years. The ethical concerns of being a practitioner researcher will be raised in another section. The participant teacher was working in a large urban public school of 280 children and I was working in a smaller urban public school of 133 children in another town in Cyprus. Both schools included children from multiple ethnic, cultural and economic backgrounds.

In terms of the children, they were sampled randomly in order to choose two girls and two boys out of about 20 children in each class for the interviews. This random selection of sample was used to reduce reflexivity. However, the two classes in my school had been observed twice, so the total sample of children in each of these classes (1 and 2) was eight. Thus the total sample of children for the interviews/VSR sessions in both schools was 24.

3.3.2 Organisation and data collection methods

The data collection took place during a two months period (March 18- May 20, 2011). The data sources triangulated in order to shed light to the research questions were the following (including all cases in both sites):

- six classroom observations of approximately 65 minutes each (video-recorded)
- six semi-structured interviews and video stimulated review (VSR) with children of approximately 40 minutes each (video-recorded)
- four self-VSR sessions (written)
- preliminary semi-structured interview with the participant teacher of approximately 20 minutes (video-recorded)
- two semi-structured interviews and VSR with the participant teacher of approximately 40 minutes each (video-recorded)

Table 1 summarises the information about the data collection from the classroom observations. At first, I planned and conducted four DG lessons in my school, the Pebble Primary School, in two different classes. While I was teaching I had to engage a camera operator. There were two video-cameras recording the event: one stable for the children and another one mobile focusing on me. Soon after the lessons I interviewed the children using VSR (Appendix 1). I also conducted self-VSR sessions (Appendix 2) as soon as I went home after each lesson in order to remember and reflect firstly as a teacher and then as a researcher using the VSR protocol I had prepared for the participant teacher.

School ¹	Class	Number of children	Teacher	Lesson theme/focus	Duration in minutes	Date
Pebble Primary School	1	22	practitioner researcher	Lesson 1: Self-esteem	66:14	18/03/11
	2	23	practitioner researcher	Lesson 2: Respect	71:03	21/03/11
	2	23	practitioner researcher	Lesson 3: Gratitude	67:35	04/04/11
	1	22	practitioner researcher	Lesson 4: Solidarity	72:36	08/04/11
Drop Primary School	3	17	participant teacher	Lesson 5: Responsibility	64:48	18/05/11
	4	17	participant teacher	Lesson 6: Respect to the environment	58:05	20/05/11

Table 1: Classroom observations for the main study

The week before the data collection in the Drop Primary School, I visited the school to conduct the preliminary interview with the teacher (Appendix 3). This interview sought to establish his instructional background as well as his views and perspectives about the DG. Then he planned and conducted two DG lessons in two different classes and I was recording the lessons with the same procedure. After the lessons I interviewed the children and then the teacher using VSR.

² School names are pseudonyms.

Group interviews were used to provide valuable contextual data and insights into special issues as these emerged. Additionally, they provided a lot of data in a relatively short time. However, I was careful to manage the group discussion and not to leave any group member dominate the encounter (Burgess *et al.*, 2006).

Video-recorded classroom observations were a good means for providing evidence about teacher talk and body language and also children's PT in the DG. In contrast, structured observation schedules would fail to provide details and novel data (Burgess *et al.*, 2006). The main advantages of video-recorded observation as a source of evidence are that it covers events in real time and it also attempts to cover the context of a case; there are though some weaknesses such as that the event may proceed differently because it is being observed and filmed (Yin, 2009). I sought to mitigate such weakness triangulating the methods and studying six different lessons.

I used video recordings for the classroom observations because PT encompassing action is inevitably related to bodily acts. Video camera is seen by Denscombe (2003) as a reliable research instrument since it captures the proceedings on a permanent record and offers the advantage to turn back the video if some information was missed during the transcription. In my study I used two cameras, the one being stable and wide-length for capturing the whole-class activity and the other following the teacher. The transcription and interpretation of the video-recordings included my subjective views as the researcher (see ethical considerations in sub-section 3.3.5 below).

Also, the use of a machine may have caused problems of disruption and reactivity in the educational settings, meaning that when children know they are being observed and filmed, they may change their behaviour. In order to minimise the influence on the participants, I positioned one of the two cameras (whole-class camera) in a corner of the hall so that it was

not strongly noticeable and tried to be as unobtrusive as possible handling the second camera (teacher camera). In the cases that I was the teacher, the camera operator was advised to do the same. The teacher camera maintained a continuous record of the teacher's statements and actions, while the stable camera was set up in a corner of the classroom to capture the actions of all the children. There were though some constraints such as cases in which some of the children moved to corners that were not captured by the stable camera.

Video and more generally visual data are not considered as objective research documents because they represent more complex past actions; they are two-dimensional representations of the three-dimensional real events; thus they constitute simplifications of the reality (Loizos, 2000). The use of visual methods raises issues about the relationship between seeing and knowing or understanding (Harper, 2003). It is argued that 'to observe is to choose a point of view' (*ibid*, p.183) and this point of view may relate to the researcher's interests and values (see sub-section 3.3.5 below). However, video shows so much information that it is a useful tool for the analysis of face-to-face interaction.

Video stimulated review (VSR) was used to provide reflection on the background of the teacher's and children's talk and actions. It is an acknowledged method and it is viewed as a powerful tool which profiles reflection on action (Walker, 2002). It is argued it can provide insights into participants' motivations and intentions revealing feelings and thoughts (Clarke, 2003). It is also stated that it helps the researcher to view more closely the events under study and find the interesting points from which to start more detailed analysis (Theobald, 2008). This method was not used with children in previous PT research, thus my study attempts to provide additional information for helping articulating the meaning of children's contributions in the classroom.

According to researchers who investigated PT, VSR provides a dialogic view of classroom interactions which can stimulate reflection and critical conversations about PT (Burnard *et al.*, 2006); thus recent research on PT has employed this particular tool. Both the participants and the researcher identified critical episodes, so that a sharing of control over the discussion topics occurred; at first the participants were given freedom to decide points to focus on and afterwards I raised issues that I considered important and were not already covered, following the suggestions offered by Rowe (2009). This was intended to reduce any feelings of power differential between interviewer and interviewees, and reinforce a sense that their views were valuable, rather than the interview being seen as a search for the 'right' answers. Each critical episode was noted by tape-time reference.

The VSR sessions used a series of semi-structured open-ended questions posed to the participants during the viewing of the video clips. The questions were designed in a way to reflect the focus of the study employing an indirect route (Lyle, 2003). These VSR sessions were again video-recorded for analysis. The reason for video-recording the interviews and VSR sessions was mainly the need for reflection on my position as a researcher and also for having a clearer picture of the participants' views and reflections.

A major concern about the use of VSR is the possibility of a new view rather than a review of an episode by the participants, in a way of formulating 'novel interpretation' of the experience (Lyle, 2003, p.865). In order to minimise this constraint, I sought to minimise the time delay between event and VSR (about 1-2 hours) and also carefully designed the interview/VSR questions (see interview protocols in Appendices 1 and 2).

3.3.3 *Generalisability and relatability*

Concerning generalisability of the findings, it is argued that case study is not concerned with 'statistical' but with 'analytic generalisation' which contributes to theory modification or policy implication (Yin, 2009, p.38). Bassey (1981, cited in Bell, 1999, p.11) refers to the notion of 'relatability', meaning the extent to which details given in a case-study report are sufficient for a teacher working in a similar situation to relate his/her decision-making to that described in the report. Similar situations might be schools of the same type (e.g. primary, urban, public), with similar number of children and similar ethnic and socio-economic origins of the children (Bell, 1999). So the conclusions of this study might be found useful to teachers working in public primary schools in all the towns in Cyprus and other similar contexts, to policy agents and research audience.

3.3.4 *Trustworthiness, quality and rigour*

In an attempt to collect and analyse the data of this study in a way to represent as closely as possible the experiences of those studied, I followed the criteria for trustworthiness, quality and rigour offered by Lincoln and Guba (1985): credibility, transferability, dependability and confirmability. My underlying epistemological stance for viewing learning as socially constructed is articulated through the collection and analysis of the data.

Credibility in this study is ensured using triangulation and peer checking (Lincoln and Guba, 1985). Triangulation of the findings, which means checking results using two or more research methods (Burgess *et al.*, 2006), was facilitated using multiple methods for data collection within participants and getting perspectives from different participants (video-recorded classroom observations, interviews and VSR sessions with the children, the teacher and me as a practitioner researcher). The three different data sources (transcripts of the video-recorded

lessons, transcripts of the teachers' interviews and VSR and finally transcripts of the children's interviews and VSR) are three distinct perspectives of the same experience. I also used peer checking getting advice from my supervisors and a co-analyst friend who offered useful comments on early analysis.

The criterion of transferability resembles the notion of relatability analysed in the previous sub-section. The dependability and confirmability of this research is not connected to replicability of the findings by other researchers, because the findings are dependent on my own interpretation. However, I tried to ensure confirmability by transparently demonstrating my thinking processes, justifying decisions and reflecting on my research processes throughout the thesis.

3.3.5 Ethical considerations and procedures

In order to access the two sample schools I got permission to conduct the research by the Cypriot Ministry of Education & Culture (Appendix 4) and then I asked permission from the two head teachers. I informed the headteacher of the Drop Primary School by phone calling and faxing the agreement paper of the Ministry of Education & Culture, while access in my school was easier because of the face-to-face communication. Concerning children and trying to minimise the ethical issues that arise while working with children as participants, I got permission from their parents sending a letter to inform them that the aim of the study is the improvement of teaching and learning and ensure the children's anonymity and confidentiality of the findings (Appendix 5). In cases that parents did not agree to their child being video-recorded, then that particular child did not participate and went to another classroom. This did not happen at my school perhaps because the parents happened to know me. However, it happened for some children in the other school, and this raises issues with taking children out

of experiences if their parents do not give permission for being video-recorded. The children's assent was also sought prior to the commencement of the lessons by informing them of their right to choose if they wanted to take part. The right to abstain or withdraw from the project at any time was upheld and both raw and analysed data material was anonymised and stored in a secure place.

The fact that I was a practitioner researcher in my school raised some ethical considerations. Studying my own lessons and researching my students displayed bias towards the participants (Burgess *et al.*, 2006). For example, during the children's interview, I sometimes found it challenging to keep the role of the researcher and my role as teacher separate. Although I was trying to avoid talking to the children as their teacher and understanding the need to give affirmative feedback with the same kind of intonation, I sometimes found my self reacting naturally and explaining raised issues. On the other hand, there are a number of advantages in practitioner research including ease of access, saving time, a lower research budget and most importantly the ability to understand better my students' responses and my own verbal and non-verbal language during transcription and analysis.

Research necessarily involves the capabilities, understandings and insights of the researcher. The researcher's own identity background and beliefs have a role to play in the data collection and analysis (Denscombe, 2003). Reflexivity that can arise through the influence of the personal and social characteristics of the researcher constitutes a common ethical issue in qualitative research. Reflexivity means that the researcher's personal values, beliefs and interests/capabilities influence his/her work in the research process, the interpretation and dissemination of the findings. My perceptions, theoretical and empirical grounds and ability to specify and describe the findings influence the findings of my study *per se*. Being reflexive

means to be aware of the multiple influences you have as a researcher on every aspect of your research, for example the topics, the participants and your audience (Gilgun, 2010). Finlay & Gough (2003) examining how the researcher and inter-subjective elements impact on and transform research, they distinguish reflection and reflexivity in the following way:

Reflection can be understood as 'thinking about' something (an object). The process is a more distanced one and takes place after the event. Reflexivity, by contrast, involves a more immediate, continuing, dynamic and subjective self-awareness. (p. 108)

For example, I am interested in the development of the DG method and I have a desire to improve it as well as an intention for career development; I sought to balance this personal interest and intention with the detachment I must employ as a researcher. I tried to stay neutral during the implementation of my study, to describe the whole procedure with 'transparency and openness' (Burgess *et al.*, 2006, p.33), and to use triangulation in order to gain trustworthiness, quality and rigour (Lincoln & Guba, 1985). I also sought to adopt a critical stance to the evidence, questioning what and why I was doing something and negotiating my position and research activity.

Another ethical concern is the relationships between the researcher and the participants. In the cases where I was an insider researcher, the quality of data may differ because I have closer relationships with the children. I used to teach to classes 1 and 2 in Pebble Primary School (see Table 1 above) four lessons per week for a seven-month period until the time of the data collection. In Drop Primary School I had only the role of the researcher and did not know the children at all. However, I knew the teacher and there was a trustful and honest relationship between the two of us. I asked him to participate in my study ensuring that he had nothing to worry about because he would make the lessons in his normal and natural way; he agreed

without hesitation. For confidentiality issues the names of the children and the schools were altered.

Other difficulties were the transcription and translation I had to conduct from Greek-Cypriot transcripts to English. Due to noise problems I had to engage a loudspeakers' system during the transcription phase. The transcription system followed was an adaptation of Gail Jefferson's work (Atkinson & Heritage, 1984, p. ix-xvi) and is shown below:

did.	a full stop indicates a stopping fall in tone
here,	a comma indicates a continuing intonation
do?	a question mark indicates a rising intonation
together!	an exclamation mark indicates an animated tone
<u>does</u>	underline indicates emphasis with increased volume
...	three dots indicate pause
(...)	parenthesis including three dots indicates that the talk is not audible
so:::ry	colon represents a sound stretch
[moving]	bold words in brackets annotate non-verbal activity

Table 2: Transcription system

I undertook the data analysis based on the original transcripts in Greek-Cypriot dialect in order to consider the nuances of the conversations. Then I carefully translated the critical episodes and the interviews into English. The choice of the critical episodes will be explained in the next sub-section, which presents the process of data analysis undertaken.

3.3.6 Data analysis process

Data analysis had both a deductive and inductive character. Deductive in the sense of testing theories and working with existing set of PT categories (Burnard *et al.*, 2006; Chappell *et al.*, 2008) and inductive identifying emergent categories and relationships between teacher talk and children's PT. As Burgess *et al.* (2006) stated 'such an inductive approach is particularly useful where the literature around your chosen research question is relatively underdeveloped' (p.47); there are indeed gaps in the literature regarding for example the relation between teacher talk and children's PT in the context of drama as well as in other learning contexts.

In the data analysis I aimed at first to identify open and axial codes in both the two core strands of the research: children's PT and teacher talk. Regarding PT features I worked deductively testing the eight codes from the research literature i.e. posing and responding to questions, play, immersion, innovation, being imaginative, self-determination, risk-taking and intentionality/action (Burnard *et al.*, 2006; Craft *et al.*, 2008) and remained open to other possible PT features which might emerge from analysis. In relation to teacher talk and body language I worked inductively having in mind some axial codes from the initial findings of the pilot study as well as my earlier literature search and attempted to enrich them with open coding. Thus my primary aim was to identify categories and concepts emerging from the texts, and then link them into the axial codes.

The whole process of analysis followed seven stages. During the first stage I analysed the findings of the pilot study (see section 3.2); my analytic framework was based on features of the children's PT and PT pedagogy already empirically based by previous research. I then reflected on the findings from the pilot study and revised the analytic framework.

In the second stage of analysis, I had already collected the data of the main study and made a sample analysis (only the first lesson) in order to get feedback from my supervisor. The analytic process adopted in this second stage is shown in the following diagram (Figure 5):

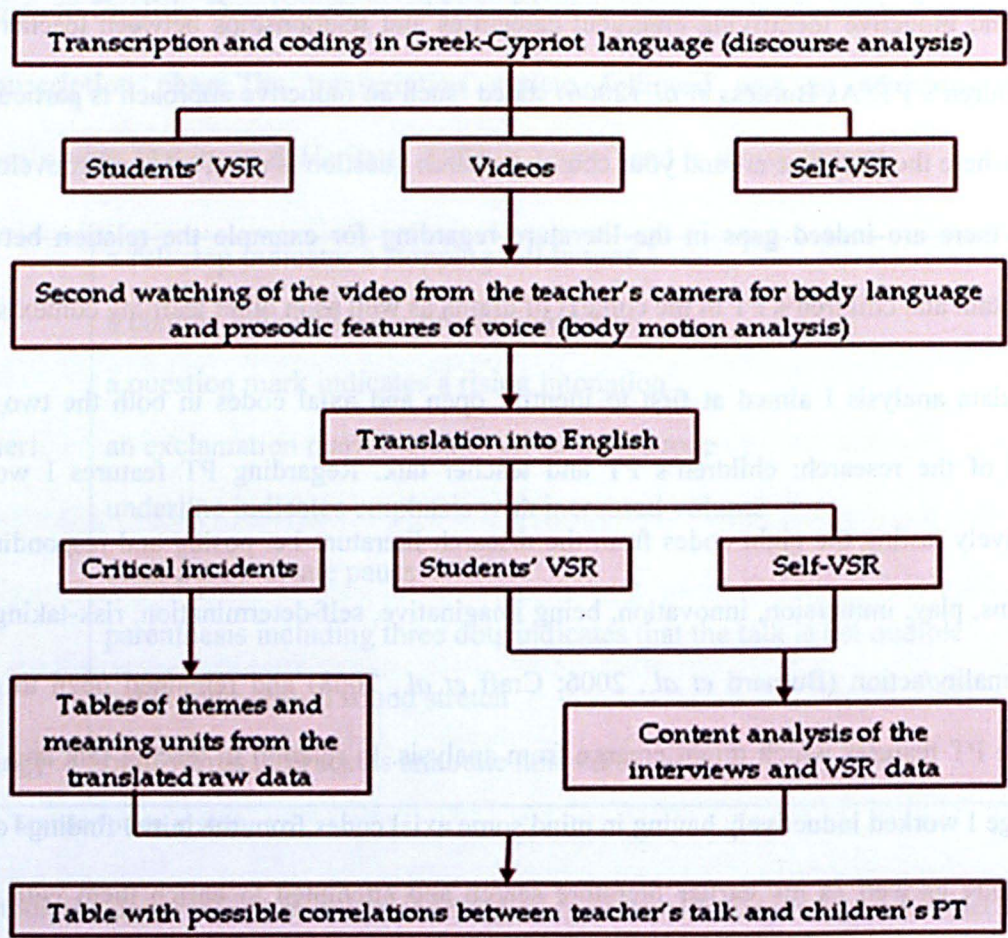


Figure 5: The journey of the second analytic stage

I followed the above procedure for analysing the four critical episodes from the first lesson. At first I transcribed the children's interview and VSR in order to note the episodes from the lesson which children had chosen as critical, because they found them more interesting. Then I completed the selection of the critical episodes using my choices in the VSR sessions; I chose discrete activities where children's PT was made clearly visible through verbalisation or action.

In the rest of the lessons the participant teacher chose episodes during which he found the children's behaviour interesting. I decided, also based on my reflections from the pilot study, that each episode should not exceed the five minutes time frame so that data analysis would be manageable.

The next step was to watch the whole videos and write down the exact time duration of the critical episodes (four in each lesson). Transcribing these episodes I was noting the time of each utterance. Then I was doing a second watching from the teacher's camera to add elements of the body language. At that stage of analysis I was also noting some prosodic elements of teacher voice, but in later stages I let them behind because I found it difficult to document all the acoustical changes in teacher's voice without appropriate technical support. Also, I decided that this limitation would not be too much to the detriment of the data analysis.

Looking at the transcribed critical episodes I used colour highlighting to separate teacher's and children's talk and actions and coded each meaning unit. Meaning units were considered the strings of text that express a single coherent thought up to the point at which coherent thought changes. Grouping meaning units helped me generate theme statements for teacher talk; I defined themes in a way to 'reflect the meaning of the retrieved words or phrases' by my subjectivist interpretations (Yin, 2009, p.128) and literature search. For example, if the teacher posed a question to the children, I tried to identify what kind of question it was concerning its aim/function. Triangulation of findings using data from the interviews helped me to review and refine themes as well as to identify connections among the various data providing a clearer picture of the context. VSR sessions helped me clarify the participants' intentions if possible and find out more about their thinking in many instances. However, the critical episodes from the lessons were the main focus of analysis because the cases in my multiple

case-study were the lessons themselves; data from the interviews and VSR sessions were considered supplementary and were used to understand those episodes better.

The third analytic stage was to engage a friend teacher as to analyse four sample critical episodes from the lessons having only the PT framework in mind, so that I could confirm or not some confusing categories of teacher talk and the documentation of PT features. The co-analyst's views had been extremely useful for establishing some first relations among the strands of the research. Some inductive themes on teacher talk emerging from the four samples of analysis by the co-analyst were the following:

- Guiding to concentrate attention
- Stimulating imagination and introducing fantasy elements
- Prompting to think different possibilities through expressive talk and body language (e.g. sudden moves to stimulate interest)
- Asking to solve a problem and giving space to find their own solutions
- Asking for clarifications
- Asking to reflect on their actions
- Encouraging for a verbal and/or physical response
- Commenting on responses
- Supporting/rewarding

These inductive themes from the co-analyst's point of view were taken into consideration for the revision of the analytic framework, particularly adding the themes of provocations/prompts and confirming the themes of clarifying questions and support/encouragement.

The fourth analytic stage was the hand-written analysis of all the 24 critical episodes chosen by the participants, based on the following analytic framework (Table 3):

Teacher talk	Teacher body language	Children's PT
1. PROVOCATIONS	1. KINESICS	1. QUESTION-POSING
<ul style="list-style-type: none"> a) Provocations/prompts for imagination and action b) Provocations/prompts for reflection 	FACIAL EXPRESSIONS <ul style="list-style-type: none"> a) Gaze (eye contact, observing, looking around) b) Eyebrows movements c) Mouth movements (smile, squeezing lips) d) Head movements (nodding, tilts) 	<ul style="list-style-type: none"> a) 'What if' questions b) 'As if' questions (in-role)
2. MODELLING		2. QUESTION-RESPONDING
<i>Showing examples of discourse or body movement</i> <ul style="list-style-type: none"> a) Role-modelling b) Modelling empathy c) Modelling reasoning 	HAND-ARM GESTURES <ul style="list-style-type: none"> a) Arm movements (opening, hand on chest, scratching the chin) b) Palm movements (opening, clap, applause, hand waves, joining hands together) c) Finger movements (on nose, pointing, index finger and thumb touching at tips) d) Touching 	<ul style="list-style-type: none"> a) Describing b) Explaining c) Building upon previous contributions d) Hypothesising e) Comparing f) Reasoning g) Negotiating h) Synthesising i) Problem-finding j) Problem-solving k) Clarifying l) Testing m) Evaluating n) Rejecting o) Compensating p) Completing q) Repeating r) Accepting s) Undoing
3. QUESTION-POSING		
<i>Leading, service or follow-through questions with degree of possibility: broad, moderate or narrow</i> <ul style="list-style-type: none"> a) Challenging b) Process c) Critical d) Clarifying 	POSTURE <ul style="list-style-type: none"> a) Standing b) Sitting c) Moving (walking, dancing) d) Miming 	
4. RESPONDING		
<i>Responding to the children's verbal or silent questions and other contributions</i> <ul style="list-style-type: none"> a) Suggesting b) Prompting c) Explaining/clarifying d) Revoicing/paraphrasing e) Completing f) Compensating 		
5. FEEDBACK	2. PROXEMICS	3. BEING IMAGINATIVE
<ul style="list-style-type: none"> a) Support/encouragement b) Praise c) Acceptance of alternative ideas d) Surprise e) Gratification f) Management of quietness and time 	<i>The use of space and distance from children</i> <ul style="list-style-type: none"> a) Close b) Far away 	<i>Creating an 'as if' world, unusual interpretations/answers stepping beyond the obvious</i>
6. PAUSES		4. SELF-DETERMINATION
<i>Listening and observing the children</i>		<i>Self-directed decisions and actions without any adult intervention and owning/making sense of activities</i> <ul style="list-style-type: none"> a) Choices b) Decision-making c) Confidence d) Spontaneous expression e) Meta-cognitive skills <ul style="list-style-type: none"> • Processing <i>Reflecting on the process of learning/achieving something, explaining new experiences</i> <ul style="list-style-type: none"> • Strategy use

		5. INTENTIONAL ACTION/ INTENTIONALITY
		<i>Intentional action: activity/behaviour having a clear goal</i>
		<i>Intentionality: verbal intention for action</i>
		6. INNOVATION
		<i>Unusual connection-making between ideas, developing new ways of understanding, novel words or actions, unique outcome/behaviour</i>
		7. RISK-TAKING
		<i>Confidence to take risks in a safe/secure environment, some level of danger/failure/fear</i>
		8. PLAY
		a) Improvisation b) Playing with new possibilities being in an ‘as if’ space c) Having fun/humour
		9. IMMERSION
		a) Attention/absorption b) Focus/concentration c) Sensory immersion (<i>incorporation of a role using all senses</i>)
		OTHER

Table 3: The coding framework for analytic stages 4-7

Then, having in mind that detailed analysis and presentation of all the 24 episodes was not feasible in a study of this extent I selected nine episodes using the following criteria:

- a) the frequent manifestation of children's PT features (imagination, risk-taking, question-posing and responding, intentional action, self-determination, innovation, play, and immersion) except for development which has not been empirically defined clearly yet,
- b) the manifestation of the collaborative context (children building ideas together and with their teacher) and
- c) the manifestation of teacher talk and body language.

Thus, the fifth analytic stage included detailed analysis of nine critical episodes. That stage revealed the prominence of self-determination in relation to other children’s PT features in the

study. Thus it focused on the relationship of teacher talk and body language with only this aspect of children's PT. However, in order to be consistent with my research questions as to investigate all the PT features evident in the DG lessons and not focusing on the most common one, I moved to a sixth analytic stage.

The sixth stage included review of the nine critical episodes exploring the relationship of teacher talk and body language with all the features of children's PT and removed one critical episode as not offering enough data. Thus, the final number of critical episodes in the following Findings chapter is eight.

Finally, a seventh analytic stage considered all the findings summarised in tables in order to induct a top level analysis and have a clearer picture of the key findings. I used summary presentations for the children's PT features in all the DG phases, the teacher talk and body language again in all the DG phases and finally the relationship between these two strands across the main categories of teacher talk.

A useful tool for analysis and generally for the whole research process was the use of a personal research diary. In that diary I used to report my thoughts and reflections, record progress, feelings, insecurities and insights during the three and a half years of this research project. It helped me understand my decision-making processes and thus helped me to monitor developing analysis. The diary was handwritten and included notes to self, questioning, confusions, personal discussions concerning aspects of the literature, diagrams and time plans.

3.4 Summary

In this methodology chapter I presented the research approaches of this study and I explained and justified my epistemological and ontological position. Then I described the pilot study and finally focused on the main study, explaining the sampling procedures and the data collection methods in detail. I raised the issues of reliability, trustworthiness, quality and rigour and

some other ethical considerations. Finally, I described in some detail the seven analytic stages for the data analysis. The next chapter presents the findings of my study in a sequence that responds to the research questions.

4 Findings

In articulating the findings of this study I drew on evidence from eight critical episodes from the video-recorded DG lessons (for the selection process see 3.3.6) and complementary evidence from the interviews and VSR sessions. The eight critical episodes, upon which findings of this study are based, can be summarised in Table 4:

<div>DG lessons</div> <div>DG phases</div>	Lesson 1 (Class 1 + researcher)	Lesson 2 (Class 2 + researcher)	Lesson 3 (Class 2 + researcher)	Lesson 4 (Class 1 + researcher)	Lesson 5 (Class 3 + teacher)	Lesson 6 (Class 4 + teacher)
Phase 1						Episode 1
Phase 2	Episode 2 Episode 3	Episode 4				
Phase 3				Episode 5	Episode 6	
Phase 4			Episode 7			Episode 8

Table 4: Summary of the critical episodes upon which findings are based

After analysing the above critical episodes in detail, I decided to present the findings in three different sections (4.1, 4.2 and 4.3) responding to the three research questions and adding the emerging element of body language as accompanying teacher talk:

- 1) What features of children’s PT are evident during the DG?
- 2) What types of teacher talk are evident during the DG? and
- 3) What is the relationship between teacher talk and children’s PT during the DG?

In this thesis, framed by socio-constructivist theory, talk is considered as a fundamental and transformative social-psychological tool for meaning-making in creative collaboration. Body language gives more evidence about teacher pedagogy, explaining the kinesic and proxemic behaviour of the teacher (for the definitions of kinesics/proxemics see Table 3 in chapter 3). Children's PT is also documented through children's talk and non-verbal behaviour, though analysing these strands in categories was not an aim of this study. I therefore explore the mediating role of talk in the socially situated creative process of DG lessons, focusing on the ways in which certain categories of teacher talk and some elements of body language relate to children's PT. The extracts from the episodes manifest the interplay between the different categories of teacher talk (in green bold colour) and body language (in black bold colour) and the features of children's PT (in red bold colour).

4.1 The children's PT in the DG

Summarising the findings from the episodic analysis, I categorised them into how certain features of children's PT seem to manifest in each of the four phases of the DG, so that writing and reading of this thesis occurs with flow and coherence. The same procedure is used in reporting the findings regarding the next two research questions (sections 4.2 and 4.3).

4.1.1 Phase 1 of the DG

The features of children's PT evident in an extract from the first phase in a commonality sequence are presented in Table 5:

Children's PT feature	Episode 1 (total)
Self-determination	9
Being imaginative	9
Intentional action	7
Question-responding	4
Question-posing	1
Risk-taking	1
Innovation	0
Intentionality	0

Table 5: Children's PT features in Phase 1 of the DG

This first extract comes from the last lesson and it is the only critical episode from the first phase of the DG. We can see the teacher guiding and provoking the children's imagination and the children playing, moving around and enacting various roles. The children in this episode did not choose the roles themselves, though listening to the teacher's provocations they engaged physically in varied role-play each in their own way and indicated in this way their self-determination, which was the most common feature of PT along with being imaginative in episode 1 below.

EPISODE 1 from lesson 6: 'Respect to the environment'- phase 1 of the DG (class 4, participant teacher)

(Teacher is standing and talking to the children who are playing with ribbons in the space and listening to rhythmic music)

1. Teacher (T): The ribbon in our hands turns into a brush to paint an ugly grey wall. Let's make it colourful, beautiful... Bravo! Do it well... **Provocation, modelling reasoning and affirmative feedback (praise) [open arms and palms; facial expression for 'ugly']**
2. *(children are moving their ribbons with various ways)* **Being imaginative and self-determination (spontaneous expression)**
3. T: Using the other hand we are making various shapes on the wall, with different colours... **Provocation [hand waves]**
4. *(children are moving their hands in front of an invisible wall in their own way)* **Being imaginative, intentional action and self-determination (spontaneous expression)**
5. T: Now we are getting in a sunless dirty room where nobody can live and our ribbon becomes... What may the ribbon become? **Provocation, modelling reasoning and service, possibility moderate,**

critical question [crossing arms; head tilted a little backwards; facial expression for 'disgust'; clap and big eyes]

6. Max: A broom! **Question-responding (hypothesising)**
7. T: A broom in order to clean up, hurry! **Responding (completing) and modelling reasoning [arm movements right and left miming]**
8. *(children are pretending cleaning the floor with various ways)* **Being imaginative, intentional action and self-determination (spontaneous expression)**
9. T: Bravo! (...) and the ribbon now becomes... **Affirmative feedback (praise) and service, possibility moderate, challenging question**
10. Katie: A dust mop! **Question-responding (hypothesising)**
11. T: A dust mop to brush up all the furniture... **Responding (completing) and modelling reasoning**
12. *(children are pretending brushing up each in their own way)* **Being imaginative, intentional action and self-determination (spontaneous expression) [walking]**
13. T: The ribbon now becomes... **Role-modelling and service, possibility moderate, challenging question [arm movements right and left miming]**
14. Andreas: A jib! **Question-responding (hypothesising)**
15. T: A jib to clean up, to make the floor shine! **Responding (completing) and modelling reasoning [smile]**
16. *(children are pretending mopping each in their own way)* **Being imaginative, intentional action and self-determination (spontaneous expression)**
17. T: Bravo! And the only ones that don't have colour are... **Affirmative feedback (praise) and service, possibility narrow critical question [arms wide open]**
18. All: Us! **Question-responding (hypothesising)**
19. T: It's you that you're not colourful; I am red! *(he wears a red t-shirt)* You are white and grey... *(he is referring to the school uniform)* Hurry up; paint your backs, your hair... Paint each other's back, hair, legs... **Responding (clarifying), provocation [smile and clap]**
20. *(children are pretending painting each other using their ribbon in their own way)* **Being imaginative, intentional action and self-determination (spontaneous expression)**
21. T: And now that we are colourful, let's play with our ribbon! **Provocation**
22. *(children are jumping about playfully)* **Being imaginative and self-determination (spontaneous expression)**
23. T: Aha! But now the ribbon becomes an old man's walking-stick... **Provocation [finger noting]**
24. *(children are holding the ribbon like a walking-stick, bending, moving slowly and some are shouting 'feeling pain')* **Being imaginative, intentional action and self-determination (spontaneous expression) [touching some 'old people' to help them]**
25. Renos: Sir, when are you going to tell us to die? **Question-posing ('what if') and risk-taking**
26. T: I'm not. **[eye contact and smile] Responding (clarifying)**
27. T: And the ribbon in your hands turns into the wings of a butterfly! **Provocation [arms opening; smile]**
28. *(children are moving the ribbons up and down behind their backs, jumping about playfully and smiling)* **Being imaginative, intentional action and self-determination (spontaneous expression)**

In this extract we can see a whole class activity with a playful character, in which the children got immersed in an ‘as if’ space and improvised various roles using ribbons. This is an example of why play and immersion were considered as an enabling context for PT and not as distinct features. The children’s actions most of the time had a clear goal, which was framed by the imaginary context of a ‘cleaning company’ set by the teacher, although their intentional actions developed and were expressed through each child’s own physical engagement. So the development of the activity was co-determined by the teacher and the children. The children were involved in the decision-making process of what a ribbon might become and responded to the teacher’s possibility moderate questions with possibility moderate hypotheses, driven from the real world. Combining spontaneous expressions with intentional actions the children manifested their imagination and self-determination, showing that they were making sense of the activity. Renos (line 25) posed a question to the teacher about the time he would tell the ‘old people’ to die, taking the risk to be criticised for touching a sensitive and for some scary and uncomfortable issue. However, the teacher responded with a smile and being calm. The feature of innovation was not documented in this extract because there were so many simultaneous movements in the video; this made the localisation of a novel contribution extremely difficult.

4.1.2 Phase 2 of the DG

The features of children’s PT evident in three extracts from the second phase in a commonality sequence are presented in Table 6:

Children’s PT feature	Episode 2	Episode 3	Episode 4	Total
Self-determination	7	12	7	26
Question-responding	4	14	7	25
Being imaginative	7	5	4	16
Intentionality	4	2	3	9
Intentional action	4	0	4	8
Innovation	2	1	3	6
Risk-taking	0	2	2	4
Question-posing	1	0	1	2

Table 6: Children’s PT features in Phase 2 of the DG

In the second phase children’s self-determination was the most common PT feature, documented mostly in their choices for assuming imaginary or fantasy roles and often taking the risk to ventilate sensitive issues. In the following extract self-determination manifested in the children’s confidence for assuming roles such as ‘the goddess of beauty’, in combination with imaginativeness, intentional action and innovation. All these PT features manifested in the children’s attempts to respond to the teachers’ possibility broad challenging leading questions.

EPISODE 2 from lesson 1: ‘Self-esteem’- phase 2 of the DG (class 1, practitioner researcher)

(Teacher and children are standing in a circle and respond to the teacher’s possibility broad challenging leading question reporting which roles they had undertaken in a previous imaginative trip. The teacher had already role-modelled a snow fairy who got into the sea)

1. Irene: I was the fairy of fuchsia and I got into the blue! **Question-responding (building on previous contributions), being imaginative, intentionality and self-determination (choices)** [head-nod]
2. Teacher (T): Hah! Show us. **Affirmative feedback (surprise) and provocation** [big eyes and mouth]
3. Irene: *(she walks having hands crossed on her chest and suddenly stops scared; they all imitate her)*
Being imaginative, self-determination (choices) and intentional action [miming moving forward and back]

4. T: Very nice! Now Stella. Shhh. Yes? **Affirmative feedback (praise and management of quietness) and provocation [finger on the nose, arms and palms open to show the boundaries of the circle]**
5. Stella: I was the fairy of the water and I got into the desert! **Question-responding (building on previous contributions), being imaginative, intentionality and self-determination (choices) [head-nod]**
6. T: Oh, my goodness! Let's watch it! **Affirmative feedback (surprise) and provocation [big eyes and mouth]**
7. Stella: I got into the desert and I was sweating! (*she's moving hands like it's hot*) **Being imaginative, self-determination (decision-making) and intentional action**
8. T: Ouf!!! (*they all imitate*) Very nice. Mary? **Affirmative feedback (praise) and provocation [miming giving emphasis]**
9. Mary: I travelled to mythology and I was a goddess, the goddess of beauty. (*she's swinging mincingly*) **Question-responding (describing), being imaginative, intentionality, self-determination (confidence) and innovation [head-nod]**
10. T: Wow! **Affirmative feedback (surprise and praise) [big eyes and mouth]**
11. Mary: And I was on the clouds and I was throwing snowflakes down to earth. **Question-responding (completing and building on previous contributions), being imaginative, intentionality, self-determination (decision-making) and innovation (unusual connection-making)**
12. T: Wow! Show us! **Affirmative feedback (surprise, praise and gratification) and provocation [big eyes and smile]**
13. (*non-verbal/silent question about whether it is acceptable to lay down*) **Question-posing ('what if')**
14. T: Do whatever you want! **Provocation [arms and palms open]**
15. Mary: I was on the clouds and I was doing like that... (*she's lying down and moving arms and fingers up and down*) **Being imaginative, self-determination (decision-making) and intentional action [head-nod]**
16. T: Very nice. Anyone who wants to lay down... **Affirmative feedback (praise) and provocation**
17. (*they all imitate*) **Intentional action**
18. T: Very nice, let's go back. Bravo, good kids! **Affirmative feedback (praise) and provocation [miming]**

We can see that the first two girls (Irene and Stella) continued the same pattern which their teacher had modelled before, assuming the fantasy roles of fairies that were moving about two antithetical worlds. This building upon previous contributions suggests a co-determination of decision-making amongst the teacher and the children, and manifests an immersive context where participants observed and listened carefully to each other. The feature of immersion in this critical episode was also noted by the teacher (researcher) in the VSR session in terms of active listening and being in the moment while participating.

Although each of the girls chose to enact a different situation, probably expressing inner interests and wishes/desires, it was Mary (lines 9, 11, 13 and 15) that explored alternative possibilities and made a novel contribution managing an unusual connection-making between ideas. She connected the previously reported by the teacher 'snow fairy' with the ancient Greek goddess Aphrodite and, being confident to report that she was the goddess of beauty, she decided to throw snowflakes down to earth. She posed a non-verbal question to the teacher whether it was acceptable to lay down (line 13) and after the teacher gave her the permission to do whatever she wanted, she lay down and moved her arms and fingers up and down. Her innovative response revealed a considerable degree of self-determination and imaginativeness.

In another case from the second phase (in the same lesson) there was a shift from fantasy to the real world, where children were prompted by the teacher to report their own special characteristics. In this activity there was no intentional action because of the convention, but there was much question-responding in terms of hypothesising, describing, clarifying, negotiating, reasoning and problem-solving, often building on previous contributions.

EPISODE 3 from lesson 1: 'Self-esteem'- phase 2 of the DG (class 1, practitioner researcher)

(Teacher and children are standing and moving in the space)

1. Teacher (T): We are spacing out and moving in the rhythm of the music. We are focusing mainly on our self. We are focusing on our self and thinking our own important characteristic! So, something that makes us special! **Provocation for action and prompt for reflection [hand on chest]**
2. T: Is it something in our body? Is it something in our personality? So, we are thinking of this characteristic and moving around having that in our mind. **Provocation for action and prompt for reflection; leading, challenging and possibility broad questions**
3. T: Once the music is off freeze! 1, 2, 3. Good. Now as we are on the spot, whoever is touched by the fairy will tell us his/her special characteristic. **Provocation [turning music down and assuming the role of the fairy touching the head of a boy with her right hand]**
4. Andrew: Mine is Mike's hatred...it's very big! (Mike is one of his classmates) **Question-responding (describing) , self-determination (choice) and risk-taking**
5. T: Your own characteristic, you are Andrew! **Responding (clarifying) and prompt for reflection [eye contact and touching his head again]**
6. Andrew: Hatred, hatred! **Question-responding (repeating) and self-determination (confidence)**

7. T: So it's hatred. Do you hate people? **Responding (re-voicing), affirmative feedback (acceptance of alternative ideas) and follow-through, possibility moderate, challenging/clarifying question [ugly facial expression for 'hatred']**
8. Andrew: Some of them. **Question-responding (clarifying), self-determination (choices)**
9. T: So, some of them...Ah, by the way, what we are saying, once it is important let's also say why it is useful. Would you like to try again later or you are ok? **Responding (re-voicing and clarifying), prompt for reflection and follow-through, possibility moderate, challenging question [looking at the whole class and then again at Andrew; finger pointing in the air to give emphasis]**
10. Andrew: Try again. **Question-responding (negotiating)**
11. T: Good. Cause we haven't told this detail earlier. Once something is very important thus it is useful in our life. **Responding (clarifying) [finger tips and thumbs touching each other and hand move; touching Natalie's head]**
12. Natalie: I feel joy and love for everyone. **Question-responding (describing) and self-determination (choices) [eye contact and head-nod]**
13. T: Joy and mainly love for everyone. How can that help you in your life? **Responding (re-voicing) and follow-through, possibility broad and challenging question [arms and palms open]**
14. Natalie: If I am good, everybody will be good with me too. **Question-responding (reasoning), being imaginative and self-determination (meta-cognition: strategy use) [head-nod]**
15. T: Very very nice! **Affirmative feedback (praise) [touching Andrew's head]**
16. Andrew: I feel joy, and if I see something I don't like, let's say someone who is playing with my nerves, I suddenly feel hate...but then I concentrate to my self and relax. **Question-responding (building on previous contribution, reasoning problem-finding and solving), being imaginative, intentionality, self-determination (meta-cognition: processing) [head-nod]**
17. T: You can relax...So you are able to concentrate and relax. That's the positive characteristic! Very nice! Whoever I touch speaks. **Responding (re-voicing and evaluating) and affirmative feedback (praise) [eye contact; touching her forehead for 'concentrate'; touching Nic's head]**
18. Nic: I feel joy because when I play with my friends I am happy! **Question-responding (building on previous contribution and reasoning), self-determination (choice) and being imaginative [eye contact and head-nod]**
19. T: Very nice. Listen to me for a while; it is not necessary to be just a feeling. Something in our body or in our personality, our character, that makes us special! **Affirmative feedback (praise) and responding (clarifying) [hand on chest; touching Angelina's head]**
20. Angelina: Eh! I am a good actress! **Question-responding (describing) and self-determination (confidence) [touching nose and head-nod]**
21. T: Very nice! And how could that help you? **Affirmative feedback (praise) and follow-through, challenging and possibility broad question [eye contact]**
22. Angelina: It will help me have a big career in my life! **Question-responding (reasoning), being imaginative, self-determination (confidence and meta-cognition: strategy use)**
23. T: Very very nice! **Affirmative feedback (praise) [moving towards/getting closer to Tasos and touching his head]**
24. Tasos: I like books very much! **Question-responding (describing) and self-determination (choice) [head-nod]**
25. T: Yes, and? **Follow-through, challenging and possibility broad question**
26. Tasos: And this will help me in orthography and other things... **Question-responding (reasoning) [big eyes and mouth; continual head-nods and squeezing lips]**

27. T: Very very good! **Affirmative feedback (praise, surprise and gratification) [touching Mike's head]**
28. Mike: I've got the characteristic of farcical and I can make Andrew and others get angry! **Question-responding (describing), self-determination (choices), intentionality and risk-taking [smile and eye contact]**
29. T: Wait a minute. I like farcical, but is it only to make others get angry? **Responding (evaluating) and follow-through, challenging and possibility broad question [head tilted a little backwards]**
30. Mike: No, no. It can help me get money. Let's say, the president may hire me, like kings use to have zanies, and give me salary for that! **Question-responding (hypothesising and reasoning), being imaginative, self-determination (confidence and strategy use) and innovation (unusual connection-making) [head-nod and big mouth]**
31. T: Very nice. **Affirmative feedback (surprise and praise)**

This is a whole class collaborative activity which also had a playful character, because the teacher pretended to be the fairy and whenever she touched a child's head the child 'defrosted' and declared a special personal characteristic. The children were therefore in an 'as if' space and improvised a role that they believed fitted their personality. A co-determination of choices was also manifested since the children made their decisions about what to declare building on previous contributions. Responding to the teacher's possibility broad leading question they chose, described and reasoned their characteristics, clarified if necessary and eventually realised how they could solve their potential problems. Most of them revealed an amount of confidence through their answers. For example, Andrew (lines 4, 6, 8, 10 and 16) and Mike (lines 28 and 30) played out their personal emotional conflicts and took the risk to express their contradiction with each other gaining an increased level of self-awareness, self-esteem and self-confidence. The two boys after the teacher's challenging questions seemed to have quickly analysed their emotional world and shifted to getting over their conflict, finding their own ways to concentrate on themselves and their personal lives. These meta-cognitive processes of generating self-control and particularly emotional management, in an attempt to reason their arguments or to explain processes inherent in their imagination, might have been very useful for them in order to embed certain strategies for problem-solving.

The final transcript from the second phase is an episode where we can document collective PT more clearly. This extract also offers evidence for risk-taking and innovation, which are less usual across the data than imaginativeness, self-determination and question-responding.

EPISODE 4 from lesson 2: 'Respect' - phase 2 of the DG (class 2, practitioner researcher)

(Teacher and children are standing in a circle and respond to the teacher's possibility broad challenging leading questions reporting which roles they had undertaken in a previous imaginative trip in the sky and what they had been seeing)

1. Emily: I am a witch, a mean witch and I use to turn everything into black! I put the water in that sphere... you can see (*stirring in an imaginative sphere*)...and became black. And I can fly and bring the darkness. **Question-responding (describing), being imaginative, intentional action and self-determination** [head-nod; big mouth and smile]
2. Teacher (T): Ah! So you are the darkness witch! **Affirmative feedback (surprise and gratification) and responding (paraphrasing)** [eye contact]
3. Emily: Yes! **Question-responding (accepting)**
4. T: Very nice. And what have you been seeing from the sky? **Affirmative feedback (praise) and service, clarifying and possibility broad question** [eye contact]
5. Emily: I was watching many happy people and I was turning them into sad! **Question-responding (clarifying), being imaginative, intentionality, risk-taking, self-determination and innovation (unusual connection-making)**
6. T: So you were making them sad... Very good reasoning for the darkness witch. I liked it very much! Who else would like to speak? Demy. **Responding (re-voicing), affirmative feedback (acceptance of alternative ideas, praise and gratification)** [index finger and thumb touching at tips and moving]
7. Demy: (*she's pretending stirring and the other children are raising hands to guess*) **Non-verbal/silent question-posing ('as if'), being imaginative, action and self-determination**
8. T: Could you also tell us what you are because we are going to be late if we guess? **Service, clarifying and possibility broad question and feedback (management of time)**
9. Demy: Eh, madam, since it is spring time... during spring we use to clean the house in order to shine, we use to put flowers in order to smell nice... **Question-responding (reasoning), innovation, intentionality and self-determination** [head-nod]
10. T: Nice...and? **Affirmative feedback (praise) and follow-through, challenging and possibility broad question**
11. Demy: Eh, I am a housewife! **Question-responding (clarifying) and self-determination**
12. T: You are a housewife! And what have you been seeing from the sky? **Responding (re-voicing) and service, clarifying possibility broad question** [flat hand move next to the head]
13. Demy: Ehhh...
14. T: Have you been seeing dirty houses and wanted to clean them up? **Responding (suggesting) and modelling reasoning** [eye contact]
15. Demy: Yes! **Question-responding (accepting)** [laughing]
16. T: Nice! Well, I repeat the question: We are saying what we had been and what we had seen in our trip. **Leading, process and possibility broad question** [palm up and moving up and down as if weighing]

17. Helen: Madam, I cannot do the move... I was a good witch and when I saw the rainbow which Emily had made black before I flew above it; I slipped like I was on a slide and managed to clean it! **Question-responding (building on two previous contributions), self-determination, intentionality, being imaginative and innovation (unusual connection-making)** [head-nod; big eyes and biting lips]
18. T: Fantastic! Are you sure you can't do it? Try. **Affirmative feedback (praise) and service, challenging and possibility moderate question** [eye contact]
19. Stef: I can do it! (*moving to the centre of the circle*) **Self-determination** [head tilted to the side]
20. T: I think she can do it, Stef! **Responding (compensating)** [head-nod]
21. Helen: (*jumps, slides and yells 'wiii'*) **Intentional action, risk-taking, being imaginative** [smile]
22. T: Very nice. Let's do it... **Affirmative feedback (praise) and provocation**
23. (*everyone imitates the move his/her own way*) **Intentional action** [miming]

In this extract we can see four children (three girls and a boy) being immersed in a whole-class collaborative activity which has a playful character (both the children and the teacher are in an 'as if' space and the girls are improvising assuming imaginary roles). All the children manifested their self-determination of the activity making their own decisions about their roles and acting in a self-directed way each time showing that they were making sense of the activity. This sense-making is also manifested in their intentional actions. Emily (lines 1, 3 and 5) responded to the teacher's leading, possibility broad process question describing the fantasy role of the darkness witch; making connections with the feeling of sadness she undertook the risk to assume a 'bad' role saying that she was a mean witch who was transforming happy people into sad (line 5). By this way she had the danger to be criticised negatively by the teacher or her classmates, although this did not happen. Demy posed a non-verbal question to her classmates in order to guess her role (line 7) and then responded to the teacher justifying her choice (line 9) and accepting the teacher's suggestion about a possible vision-in-role (line 15). Finally Helen responded building on the two previous contributions (line 17) and managed to make a strong and innovative connection-making between ideas. She also took a risk of failure trying to assume a role she found difficult to express with moves (line 21).

This extract is particularly enlightening because the sequence of the three children’s contributions seems to develop reaching a solution. The girls through their playful actions or intentions for action such as sliding over the rainbow (lines 17 and 21) managed to remove the darkness of sadness (lines 1 and 5) from their imaginatively created worlds and bring the joy/happiness through the colours of flowers (line 9) and the rainbow (line 17). The symbol of rainbow that rises up after the rain (the tears of sadness) is a rich image generated in this context. The physical engagement of this creative idea firstly by Helen and then by everyone imitating her might have created positive emotions in the children.

4.1.3 Phase 3 of the DG

Combining the findings from two critical episodes from the third phase of the DG, the features of children’s PT that were evident in a commonality sequence are presented in Table 7:

<i>Children’s PT feature</i>	<i>Episode 5</i>	<i>Episode 6</i>	<i>Total</i>
Intentional action	14	8	22
Self-determination	13	8	21
Being imaginative	8	6	14
Question-responding	12	2	14
Question-posing	9	1	10
Innovation	6	1	7
Risk-taking	1	0	1
Intentionality	0	1	1

Table 7: Children’s PT features in Phase 3 of the DG

In the third phase the children were asked to present their collective improvisational acts, so intentional action would be evident anyway, reflecting the rich scope of drama in education. The long pause in the teacher’s direct involvement during this phase provided time to the children to direct their learning, using their imagination and manifesting self-determination.

The following extract provides evidence concerning the genesis of innovative work within an improvisational play as a co-creative achievement that involves a process of negotiation.

EPISODE 5 from lesson 4: 'Solidarity'- phase 3 of the DG (class 1, practitioner researcher)

(Teacher and children are sitting and watch a group of children that perform a collective improvisational act responding to the teacher's possibility moderate critical/challenging leading question for facing an earthquake in a train)

1. Maria: Now you are going to watch plants in the train *(driving the train)* **Question-responding (describing) and intentional action** [smile and head-nod; joining hands together]
2. Ellie: *(knocking an imaginary door)* **Intentional action**
3. Andrew: Who is it? **Question-posing ('as if') and being imaginative**
4. Ellie: Us! *(Ellie and Julie are getting closer to Andrew)* **Question-responding (clarifying) and intentional action**
5. Julie: We lost all our stuff! **Question-responding (explaining and problem-finding)**
6. Andrew: Such as? **Question-posing ('as if')**
7. Julie: I lost my precious earrings! **Question-responding (clarifying) and self-determination (choice)**
8. Andrew: Mark, go and have a search! *(speaking to Omer who pretends his assistant)* **Self-determination (decision-making and strategy use)**
9. Ellie: I have only found this apple! *(showing a plastic apple)* **Being imaginative, self-determination (choice), intentional action and innovation** [looking at a girl in the audience who is laughing; smile]
10. Julie: I have only found this little bag! *(showing a bag she had made using a cloth)* **Being imaginative, self-determination (choice), intentional action and innovation**
11. Ellie: You've found my bag! *(looking at it with surprise)* **Question-responding (negotiating)**
12. Julie: You've found my apple! *(looking at it with surprise and enthusiasm; interchanging things with Ellie)* **Question-responding (negotiating)**
13. Andrew: Let's go have a meeting to decide what to do with the trains. **Self-determination (meta-cognition: strategy use)**
14. Julie: Listen, I have lost all my things! *(blubbing)* **Intentional action**
15. Andrew: We have to tell the president to buy better trains: including first aid, at least one shelter and a big room for special occasions. Does anyone have a mobile phone? *(asking the audience)* **Being imaginative, self-determination (decision-making, confidence, strategy use, spontaneity), intentional action, innovation and question-posing ('as if')** [head-nod, big eyes and mouth]
16. Audience: *(someone pretends giving him a phone)* **Intentional action** [looking around; clap for quietness]
17. Andrew: Yes... After a year? Are you crazy? So long! *(speaking to the president and then throwing the imaginary phone on his desk)* **Question-posing (negotiating), being imaginative, self-determination (decision-making and confidence), risk-taking, intentional action and innovation** [smile]
18. Julie: I want my money back and I'm leaving. **Question-posing (negotiating) and self-determination (decision-making)**
19. Omer: *(giving her some pencils pretending money)* **Non-verbal question-responding/posing (negotiating), being imaginative, self-determination (choice), intentional action and innovation**
20. Julie: Thank you! *(turning away)* **Question-responding (accepting) and intentional action**

21. Ellie: I have lost my tissues for special occasions, my dear! **Question-posing ('as if') and self-determination (choice) [smile]**
22. Omer: Here you are. (*giving her a cloth*) **Question-responding/posing (negotiating), being imaginative, self-determination (choice), intentional action and innovation**
23. Ellie: This thing is not a tissue! **Question-responding (rejecting)**
24. Andrew: (*throwing her another cloth*) **Non-verbal question-responding/posing (negotiating), being imaginative, self-determination (choice) and intentional action**
25. Ellie: (*taking the cloth and putting it tenderly onto her face*) **Non-verbal question-responding (accepting) and intentional action**
26. Andrew: We're done! **Self-determination (decision-making)**
27. Teacher: Bravo! **Affirmative feedback (praise and gratification) [applause]**

In this extract we can see some non-verbal forms of PT such as questioning (lines 19, 24 and 25), self-determination (lines 17, 19, 22 and 24)) and innovation (lines 19 and 22). Intentional action is another PT feature which seemed very rich in physical engagement (lines 1, 2, 4, 14, 16, 17, 19, 22, 24 and 25). Non-verbal negotiation was an important emerging feature (lines 19, 22 and 24) which seemed to have blended question-responding with question-posing. For example, at the same time when Omer was responding to Ellie's request for a tissue offering her a cloth, Ellie responded back rejecting his offer and thus manifesting a non-verbal negotiation. DG seemed an enabling context for manifesting physical engagement in relation to PT, since children assumed roles and mimed using their bodies. They used imagination and empathy as necessary features for performing a role and because the roles were self-chosen we can also document self-determination. So, the opportunity that the teacher gave to the children in the DG to choose their own roles might have been one of the reasons why self-determination was common in this context. In a playful context of peer collaboration the children explored new possibilities, found problems and through shared decision-making and strategy use they attempted to solve them. They combined shared planning and improvisation based on individual initiatives; for example Andrew in the VSR session stated that he decided

to add the 'manager's office' into their group performance spontaneously while acting.

Particularly, the transcription of that interview extract is:

- Researcher: Do you think you made use of your imagination?
- Andrew: Yes, because we hadn't said that we would have a manager's office.
- Researcher: Ah, so you thought of it at that time?
- Andrew: Yes.

In the variety of choices the children seemed to be intrinsically motivated to choose what to perform and this helped them be immersed in the activity. The immersion was also evident when the performers involved the audience in their improvisational play asking for a phone (line 15). The children in the VSR session stated that they had been really immersed at the time of their performances in order to remember what the group had planned before, but also at the time of others' performances because they were driven by curiosity and the feeling of competition. There were two children from this particular episode that participated in the VSR session: Andrew and Maria. Their precise words in the interview were the following:

- Researcher: At what instances did you devote more? That is, where did you feel really concentrated and that your mind was not going anywhere else?
- Andrew: I was concentrated to the plays we were watching.
- Researcher: Ah, when you were watching the others?
- Andrew: Yes, and I was a little anxious because we hadn't managed to say all the things...and let's say we had started a little awrily!
- Researcher: We haven't realised anything! Yes, Maria?
- Maria: I was devoted at the time I was presenting and driving the train using pantomime.

The children indicated a tendency for negotiation, joint decision-making and use of strategies while being in-role, walking in the other's shoes and seeing with the other's eyes. Thus,

empathy was an important finding related to children's PT in the context of DG. They also acted with confidence in a collaborative attempt to solve problems. Some of their spontaneous reactions were documented as innovative.

The next extract presents another example of the third phase of the DG with different participants (teacher and children). Marina, the child who had chosen this particular critical incident, justified her decision claiming that the improvisational acts are the moments when children use their imagination more, play more and create something by themselves, as presented in the following transcription of the dialogue:

- Researcher: Which episode would you like to see in the video?
- Marina: Our performance.
- Researcher: Why would you prefer to see this episode?
- Marina: Because it's here that we used our imagination more, it's here that we created alone, it's here that we played more...It's here that we did something by ourselves!

This reasoning indicates the great extent of children's agency and determination of their learning in the third phase of the DG.

EPISODE 6 from lesson 5: 'Responsibility' - phase 3 of the DG (class 3, participant teacher)

*(Teacher and children are sitting and watch a group of children that perform a collective improvisational act responding to the teacher's **possibility moderate challenging leading question** about cases of responsibility)*

1. Marina: Kids, we've got a big problem! We can't live with this problem anymore! We have to find a solution. The ozone hole gets bigger and bigger. We have to go to the diviner to tell us what to do.
Question-responding (problem-finding), being imaginative, self-determination (decision-making) and intentionality [observing carefully]
2. Dina and Nic: Ok!
3. *(Dina, Marina and Nic walk on a red cloth)* **Being imaginative and intentional action**
4. Marina: Excuse us for disturbing you. We've got a problem: Humans have increased the ozone hole and we can't stand it! We are fairy-guards. We can't do anything because nobody on earth can see or listen to us. Could you suggest something? **Question-posing ('as if'), being imaginative and self-determination (meta-cognition: strategy use) [scratching his chin]**
5. Manos: I think I've got something helpful. This little bag contains garlic powder. Go and throw some onto the people's cigarettes; it will not taste good so they will stop smoking! *(he gives them the bag)*

Question-responding (problem-solving), intentional action, being imaginative, innovation and self-determination (meta-cognition: strategy use)

6. Dina, Marina and Nic: Thank you! (*Marina takes the bag*)
7. Marina: We'll tell you the results in two days! **Self-determination (decision-making)**
8. Marina: (*pretends throwing some powder into Nic's ribbon handle*) Go down to earth! **Self-determination (decision-making) and intentional action**
9. Marina: (*pretends throwing some powder into Dina's ribbon handle*) You too go! **Self-determination (decision-making) and intentional action**
10. Marina: (*pretends throwing some powder into her own ribbon's handle*) **Self-determination (decision-making) and intentional action**
11. Dina, Marina and Nic: (*moving in the space and pretending throwing powder*) **Intentional action**
12. Marina: Kids, come on! I think we're done! Now we have to cover the hole with the clouds and the sun. Hurry up! I'm going to bring the clouds, ok? You (*speaking to Dina*) bring the sun and you (*speaking to Nic*) help me to bring the clouds. **Being imaginative and self-determination (meta-cognition: strategy use)**
13. (*Marina and Nic use their blue ribbons to bring the clouds and put them onto the hole, while Dina pretends that she carries something very heavy using a yellow ribbon*) **Being imaginative and intentional action**
14. Dina: I've brought it!
15. Marina: Nice. (*she takes the yellow ribbon and throws it onto the imaginary hole*) We're done! **Intentional action**
16. Teacher: Bravo! Very nice, bravo! **Affirmative feedback (praise and gratification) [head-nod and applause]**

In the previous extract we can see that a certain child (Marina) was the leader of the group. She was leading the development of the story and as she said in the VSR session, the story was based on her ideas and then the other children of the group added their own ideas and chose their own role. She said that she is good at having novel ideas because she participates in DG lessons in the afternoon. The children being imaginative and acting intentionally managed to create an 'as if' space in the sky; assuming the fantasy roles of fairy-guards and the imaginary role of the diviner they collaborated and tried to find a solution to the problem of the 'ozone hole'. Marina used the meta-cognitive skill of strategy use (line 4 and 12) and Manos responded using another strategy in order to solve the problem (line 5).

The children's enacted story revealed their conceptions and misconceptions about the chosen environmental issue. In this exemplar, although the group of children showed their misconceptions concerning the role and the enemies of the ozone sphere, they seem to have realised the importance of the problem because in their act they made use of divine powers (fairies, diviner) to help people face the problem. Marina stated in the VSR session: 'I chose to use the sun above the clouds for double protection so that the hole would not get bigger'. The use of the sun to cover the ozone hole may have not been accidental because it is a spherical figure that could cover a round hole, it is heavy so it could not move as easily as the clouds and its energy could bring life back in a world that was at risk of dying because of the smoke. The teacher in the preliminary interview claimed that 'the DG helps the children approach, interpret and possess the world in which they live'. In this episode they chose to explore a complex environmental issue in order to respond to the teacher's leading question for showing responsibility. So they raised the problem themselves and, through agentic involvement (self-determination) and intentional actions in an imaginative context, they attempted to solve the problem suggesting their own solutions. The teacher and the children could discuss the children's emerging misconceptions during the final phase of the DG, although in this lesson this did not happen. The agenda for discussion in the last phase of the DG is an issue which raises implications for practice.

4.1.4 Phase 4 of the DG

The features of children’s PT evident in two episodes from the fourth phase in a commonality sequence are presented in Table 8:

<i>Children’s PT feature</i>	<i>Episode 7</i>	<i>Episode 8</i>	Total
Self-determination	2	17	19
Being imaginative	0	16	16
Question-responding	2	10	12
Intentional action	0	6	6
Innovation	0	2	2
Intentionality	2	0	2
Risk-taking	0	0	0
Question-posing	0	0	0

Table 8: Children’s PT features in Phase 4 of the DG

In this last phase, self-determination was again the dominant feature along with imagination whilst the children were responding to the teacher’s questions, both verbally and through intentional actions, and managing sometimes to propose innovative attributions. The reason for which question-posing was found to be absent in the extracts from phase 4 of the DG might be that the teachers in these specific lessons did not provide children with the opportunity to ask questions probably due to lack of time. This issue raises implications for practice concerning the agenda for the dialogue/discussion in this reflective last phase. The reason for the general lack of PT features in episode 7 probably is because it is a very brief episode.

The following incident is a part of the fourth phase of a DG lesson that looks like a ‘lesson stimulated recall’. As emerging through a child’s words (line 2), the open spaces of the DG provide children with an opportunity for agentive involvement in problem-solving and for

showing -through their collaborative improvisations- how they can reconstruct their world in a way that they say makes them feel better.

EPISODE 7 from lesson 3: 'Gratitude' - phase 4 of the DG (class 2, practitioner researcher)

(Teacher and children are sitting in a circle and discuss their experiences during the DG)

1. Teacher (T): What did you feel during the DG and why? Who would like to speak? **Leading, possibility broad, process question [looking around]**
2. Evie: Madame, at the beginning I felt sorry for the children who do not have their hands or their homes; the music was also sorrowful and made me feel sad, but once we began performing I started to feel joy because we helped some people to gain what they had always requested! **Question-responding (reasoning), intentionality and self-determination (meta-cognition: strategy use) [eye contact; head-nod; smile and big eyes]**
3. T: Bravo! Evie has just said a very nice sentence! Stef? **Affirmative feedback (praise, surprise and gratification) and provocation**
4. Stef: I liked everything because we could play! Especially I liked the play in which the children helped a grandma offering her a blanket to be covered in the park... **Question-responding (reasoning and evaluating), intentionality and self-determination (choice) [head-nod]**
5. T: Nice. **Affirmative feedback (praise)**

Evie (line 2) described the change over her feelings from sadness to joy explaining the reasons and thus manifesting a great deal of self-awareness. She explained that she felt sorry for the disabled and homeless people in her teacher's narrative and that the music was an important factor in making her feel this. In this extract, we can see through Evie's words that the teacher, through narrative, and the use of affective music had managed to transfer children into a problematic world. Through their collaborative improvisational plays, the children later managed to propose solutions for some of the problems. This is also an example of how extrinsic motives can be internalised meeting the children's sensitivity and needs. The description of this process of change by the child being engaged in self-evaluation indicates a meta-cognitive skill. The next child (Stef, line 4) expressed his own preferences and his need for play being engaged in both self-evaluation and evaluation of other contributions. In the VSR session Stef justified his preference of this particular improvisational play claiming that

his classmates saved a grandma who was about to die because of the cold and because she had no money to buy clothes and this made him feel nice.

The deconstruction of the real world and construction of imaginary worlds in the DG might have been useful to the children for expressing and relieving feelings and thus gaining power to solve real personal or social problems. The participant teacher in the preliminary interview claimed that children during the DG are usually deconstructing the world to understand it and if there is a will to change, then they are reconstructing it through imaginative play.

The final extract presents a different fourth phase of the DG, since the teacher decided after the discussion to prompt children to move again, experience with their body and mind, through sensory immersion, the discussed problems and thus be able to summarise and embed the proposed solutions.

EPISODE 8 from lesson 6: 'Respect to the environment'- phase 4 of the DG (class 4, participant teacher)

(Teacher is standing and talking to the children who are playing with ribbons in the space and listening to rhythmic music)

1. Teacher (T): We are moving with our ribbons... **Provocation**
2. *(children are moving all around the hall, moving their ribbons in a variety of ways)* **Being imaginative and self-determination (spontaneous expression)**
3. T: Each ribbon can become a flame which is hunting others in order to burn them. **Provocation and modelling reasoning [hand wave]**
4. *(some children are doing quick violent movements)* **Being imaginative, intentional action and self-determination (spontaneous expression)**
5. T: And each one that is being burnt can show his/her feelings through a facial expression! If a flame burns you, show how you feel using your face and body! **Provocation and modelling empathy**
6. *(some children are reacting lively and are shouting; some of them are getting on the floor)* **Being imaginative, intentional action and self-determination (spontaneous expression)**
7. T: And since you are down to the floor, move like little colourful fish and enjoy the water! **Provocation [small hand wave; head tilted to the side]**
8. *(children are moving smoothly like fish in various ways)* **Being imaginative, intentional action and self-determination (spontaneous expression)**

9. T: And while enjoying the water, the fish, turning their little eyes upwards, suddenly see the water becoming black! **Provocation [miming: turning his gaze upwards]**
10. *(children express their disgust using their face and body and making sounds)* **Being imaginative, intentional action and self-determination (spontaneous expression)**
11. T: They feel an awful taste in their mouth. They have to do something, because if they keep drinking this water they will finally be dead! **Provocation and modelling empathy [facial expression for 'awful'; arms and palms wide open]**
12. *(children are moving their hands and doing desperate attempts to rescue)* **Being imaginative, intentional action and self-determination (spontaneous expression)**
13. T: So now, we are doing a big chain... **Provocation [giving hands; walking to turn the music down]**
14. *(children are getting up, create a circle and try to make a chain using their ribbons)* **Being imaginative and intentional action**
15. T: Now we can name this chain! **Leading, possibility broad, challenging question [eyebrows up]**
16. Katie: Life chain! **Question-responding (hypothesising), being imaginative, innovation and self-determination (choice)**
17. T: Say it all loudly! **Responding (prompting) and affirmative feedback (gratification) [eyebrows up; eye contact]**
18. All: Life chain! **Question-responding (repeating)**
19. T: A life chain! How can we call it differently? **Responding (re-voicing) and service, possibility broad, challenging question [eyebrows up; head-nod]**
20. Anastasia: Friendship chain. **Question-responding (hypothesising), being imaginative and self-determination (choice)**
21. T: Friendship chain! **Responding (re-voicing)**
22. Zac: Love chain. **Building on previous contributions, being imaginative and self-determination (choice)**
23. T: Love chain. **Responding (re-voicing)**
24. Joanna: Happiness chain. **Building on previous contributions, being imaginative and self-determination (choice)**
25. T: Happiness chain... **Responding (re-voicing)**
26. Jimmy: Peace chain. **Building on previous contributions, being imaginative and self-determination (choice)**
27. T: Peace chain... **Responding (re-voicing) and affirmative feedback (gratification) [eyebrows up; head-nod]**
28. Andreas: Magic chain! *(jumping)* **Being imaginative, innovation and self-determination (choice)**
29. Anne: Solidarity chain. **Building on previous contributions, being imaginative and self-determination (choice)**
30. Marilya: Colour chain. **Building on previous contributions, being imaginative and self-determination (choice)**
31. T: Solidarity chain, colour chain... **Responding (re-voicing) [eyebrows up]**
32. Joanna: (...)
33. T: Bravo! **Affirmative feedback (praise)**
34. Katie: Respect chain! **Building on previous contributions, being imaginative and self-determination (choice)**

35. T: Chain of respect to the environment! So we are lifting our hands up to say a big stop to all those who try to destroy... **Responding (completing), provocation and service, possibility moderate, challenging question [eyebrows up; lifting arms up with palms open]**
36. All: The environment... **Question-responding (synthesising) and co-determination (choice)**
37. T: The environment! **Responding (re-voicing)**
38. All: Stop those who try to destroy the environment! (*shouting*) **Co-determination (confidence)**

This episode is an example of collective PT through co-determination of choices and decisions, a collaborative play with ideas and imaginations and an exemplar of collaborative meta-cognition explaining new collective experiences. The children used the metaphor of the chain proposed by the teacher to make a bridge between their feelings and meaning-making. They seemed to determine the development of the learning activity responding to the teacher's provocations with spontaneous expressions and intentional actions and later responding to the possibility broad leading question with imaginative hypotheses. The teacher in the VSR session mentioned that the end of the lesson with the massive cry (line 38) was the time of collective realisation and consciousness. Each individual contributed to a collective chain that might have symbolised a community of life, friendship, love, happiness, peace, magic, solidarity, colour and respect.

Coming to the final phase of the DG, we can see that this was the time when the children expressed their choices for moments they liked during the lesson reflecting on their experiences. They also made choices for representing their ideas in a communal discussion in circle, often building upon previous contributions or synthesising. Thus, aspects of individual, collaborative and communal creativity were expressed presenting a co-determined creative achievement. In an endeavour to respond with reasoning to the teacher's possibility broad questions the children were responding empathetically and were using meta-cognitive skills for describing their strategies.

4.1.5 Summary

The main features of children’s PT evident in the whole process of DG which emerged from the findings of this qualitative study were: self-determination, being imaginative, intentional action/intentionality and question-responding, as we can see in Table 9:

Children’s PT feature	Phase 1	Phase 2	Phase 3	Phase 4	Total
Self-determination	9	26	21	19	75
Being imaginative	9	16	14	16	55
Intentional action/intentionality	7	17	23	8	55
Question-responding	4	25	14	12	55
Innovation	0	6	7	2	15
Question-posing	1	2	10	0	13
Risk-taking	1	4	1	0	6

Table 9: Summary presentation of children’s PT features in the DG

The children seemed to feel free to use the imaginative and real space to think and act in order to respond to a certain challenge. In some cases they manifested innovative contributions, although the documentation of innovation in the first phase was difficult because of the simultaneous contributions of the children. The posing of questions was absent in the fourth phase of the DG probably because the teachers did not allow children time for questions. Also, risk-taking was absent in the fourth phase probably because this is mainly the phase of discussion and not exploration where risks may occur more often. Play (‘as if’ space and improvisation) and immersion (focused attention/absorption) were two PT features considered as an enabling context for the manifestation of PT because their distinct documentation in the DG was found difficult. Play is a characteristic of the nature of DG and it may be that

children are usually immersed in playful activities that are mostly self-determined and relate to their interests.

The findings summarised in Table 9 also show the phases in which each PT feature was prominent. Self-determination was prominent in phases 2 and 3 probably due to the reason that adult intervention occurred to a lesser extent. Imagination was prominent in phases 2, 3 and 4 perhaps because through collaboration ideas started to flow and a collective imaginary world was created and manifested through talk and physical engagement. Intentional action was prominent in phase 3, where the collective improvisational acts took place; in this same phase question-posing was prominent perhaps because group work may foster peer questioning. Question-responding and risk-taking were prominent in phase 2 during which the children explored issues more, usually in a safe circle setting, and innovation was prominent in phases 2 and 3 possibly because unique outcomes and connection-making can be more easily documented in collaborative activities.

Data analysis throughout the eight critical episodes helped me explore how the children's PT features appeared in the DG, developing an extended understanding of the notion of PT in primary classrooms. The ongoing revision of my analytic codes during this process resulted in the following working definitions for the PT deductive features:

a) Self-determination:

- Self-directed and confident choices, decisions and actions and owning/making sense of activities through co-determination of knowledge in a socio-constructivist frame of learning
- Spontaneous expressions (usually physical)
- Use of meta-cognitive skills, such as:
 - Processing (reflecting on the process of learning/achieving something, explaining new experiences)

- Strategy use

b) Being imaginative:

- Creating an 'as if' world
- Unusual interpretations/answers stepping beyond the obvious
- Being empathetic (think and feel what it might be like to be other than yourself)

c) Intentional action and intentionality:

- Intentional action: activity/behaviour having a clear goal
- Intentionality: verbal intention for action

d) Question-responding:

- Describing, explaining, building on previous contributions, hypothesising, reasoning, negotiating, synthesising, problem-finding, problem-solving, clarifying, evaluating, rejecting, compensating, completing, repeating, accepting. The features of comparing, testing and undoing were not evident in my study

e) Question-posing:

- 'What if' questions
- 'As if' questions (in-role)
- Negotiating

f) Innovation:

- Unusual connection-making between ideas
- Novel words or actions, developing new ways of understanding, unique outcome/behaviour (in relation to other contributions in the same lesson)

g) Risk-taking:

- Taking a risk to say or do something with some level of danger or fear

The other deductive features of PT (play and immersion) were understood as an enabling context for PT along with the emerging features of collaboration, openness and physical engagement; the reason for this categorisation is that these features were not documented as distinct features but appeared continuously during the DG activity. Thus, the characteristics of the DG context that were found to relate to the manifestation of children's PT through the data were the following:

i) Play:

- Improvisation with physical engagement
- Playing with new possibilities being in an 'as if' space
- Having fun/humour

ii) Immersion:

- Attention/absorption/devotion
- Sensory immersion (incorporation of all the senses)

iii) Collaboration:

- Peer collaboration (both in groups and in whole-class activities)
- Teacher-children collaboration (both with each individual child and in whole-class settings)
- Verbal collaboration (building upon previous contributions and building ideas together in group works)
- Non-verbal collaboration (collaborative physical acts)

iv) Openness:

- Open spaces (real and imaginative/fantasy) for play
- Freedom of choice

Now I am going to present the findings regarding teacher talk and body language, that were analysed in relation to the above PT features and enabling context.

4.2 Teacher talk and body language in the DG

In this sub-section I present the categories of teacher talk which were revealed by the analysis of the data in each of the DG phases and elements of body language (kinesics and proxemics) that accompanied them.

4.2.1 Phase 1 of the DG

Based on the episode from the first phase the analysis showed that the teacher used the following categories of talk and body language by commonality sequence (Table 10):

Teacher talk	Episode 1	Teacher body language
PROVOCATIONS	7	
Provocations for imagination and action	7	smile, open arms and palms, clap, finger noting, crossing arms, head tilted backwards
MODELLING	6	
Modelling reasoning	5	facial expressions, arm movements
Role-modelling	1	miming with arm movements
RESPONDING	5	
Completing	3	smile
Clarifying	2	smile, eye contact
QUESTION-POSING	4	
Challenging questions	2	miming with arm movements to guess
Critical questions	2	clap, big eyes, arms wide open
FEEDBACK	3	
Praise	3	eye contact
PAUSES	NA	
Listening and observing		walking, close proxemics, touching the children

Table 10: Teacher talk and body language in Phase 1 of the DG

The analysis indicated that the participant teacher in the first phase, which is the phase of release and sensitisation, used mainly provocations inviting the children to imagine a dirty room and act accordingly. He used modelling assuming a role himself and often modelled reasoning during provocations, as we can see in the following short extract from episode 1:

1. Teacher (T): The ribbon in our hands turns into a brush to paint an ugly grey wall. Let's make it colourful, beautiful... Bravo! Do it well... **Provocation, modelling reasoning and affirmative feedback (praise) [open arms and palms; facial expression for 'ugly']**
2. *(children are moving their ribbons with various ways)* **Being imaginative and self-determination (spontaneous expression)**
3. T: Using the other hand we are making various shapes on the wall, with different colours... **Provocation [hand waves]**
4. *(children are moving their hands in front of an invisible wall in their own way)* **Being imaginative, intentional action and self-determination (spontaneous expression)**
5. T: Now we are getting in a sunless dirty room where nobody can live and our ribbon becomes... What may the ribbon become? **Provocation, modelling reasoning and service, possibility moderate, critical question [crossing arms; head tilted a little backwards; facial expression for 'disgust'; clap and big eyes]**
6. Max: A broom! **Question-responding (hypothesising)**
7. T: A broom in order to clean up, hurry! **Responding (completing) and modelling reasoning [arm movements right and left miming]**
8. *(children are pretending cleaning the floor with various ways)* **Being imaginative, intentional action and self-determination (spontaneous expression)**
9. T: Bravo! (...) and the ribbon now becomes... **Affirmative feedback (praise) and service, possibility moderate, challenging question**
10. Katie: A dust mop! **Question-responding (hypothesising)**
11. T: A dust mop to brush up all the furniture... **Responding (completing) and modelling reasoning**
12. *(children are pretending brushing up each in their own way)* **Being imaginative, intentional action and self-determination (spontaneous expression) [walking]**

He also asked challenging and critical questions such as the one in line 5 above and responded completing the children's responses to model reasoning further and to prompt for action. He was offering praise looking to the children, acknowledging their contributions and showing his support. He was offering provocations to the children opening his arms and palms and smiling. He invited the children to act crossing his arms and moving his head backwards perhaps to show their turn to participate. He posed challenging questions to the children to guess using mime with arm movements; he also asked critical ones opening his arms and eyes widely and sometimes clapping. He responded to the children's contributions looking directly into their eyes and sometimes smiling. He also indicated humour with a smile and in one case he modelled a certain role miming. Once he stopped talking to listen and observe the children he was walking in the room getting closer to them and in some cases touching them showing care

and support. It was found very difficult to document these pauses with numbers, so they are presented as with non-applicable measurement (NA) in the Tables 10, 11, 12, 13, and 14.

4.2.2 Phase 2 of the DG

Based on three episodes from the second phase the analysis revealed that the teacher used the following categories of talk and body language by commonality sequence (Table 11):150

Teacher talk	Episode 2	Episode 3	Episode 4	Total	Teacher body language
FEEDBACK				31	
Praise	6	7	5	18	head-nod, index finger and thumb touching at tips and moving
Support/encouragement					head-nod
Surprise	4	2	1	7	big eyes and mouth, squeezing lips
Gratification	1	1	2	4	smile, continual head-nods, squeezing lips
Management of quietness and time	1		1	2	finger on the nose
PROVOCATIONS				16	
Provocations for imagination and action	8	3	1	12	close proxemics
Prompts for reflection		4		4	hand on chest, eye contact, touch on the child's head with the hand, finger pointing to the air
RESPONDING				16	
Re-voicing/paraphrasing		3	3	6	eye contact
Clarifying		4		4	eye contact, hand moves, finger pointing to the air
Accepting alternative ideas		1	1	2	facial expression
Evaluating		2		2	head tilted a little backwards
Compensating			1	1	head-nod
Suggesting			1	1	eye contact
QUESTION-POSING				13	
Challenging questions		7	2	9	eye contact, facial expressions, head tilted backwards, open arms and palms
Clarifying questions			3	3	eye contact, hand moves
Process questions			1	1	palm up and moving up and down as if weighing
MODELLING				2	
Role-modelling	1			1	miming
Modelling reasoning			1	1	eye contact
PAUSES				NA	
Listening and observing					head-nod, observing carefully, touching nose

Table 11: Teacher talk and body language in Phase 2 of the DG

In this phase we can see I was mainly using affirmative feedback, provocations for imagination, action and reflection, responding in various ways (re-voicing or paraphrasing, evaluating, compensating, accepting alternative ideas and clarifying) and question-posing (challenging, clarifying and process questions). I also used modelling such as in episode 2 when I opened the path for the children to travel to the fantasy world role-modelling the snow fairy. I prompted the children contribute to the activity getting closer to them and touching their head. In this way I welcomed the children making them feel safe to participate. I also posed challenging questions opening my arms and palms and making facial expressions to show my wonder and stimulate children to respond, as it is evident in the following extract from episode 3:

1. Natalie: I feel joy and love for everyone. **Question-responding (describing) and self-determination (choices) [eye contact and head-nod]**
2. Teacher: Joy and mainly love for everyone. How can that help you in your life? **Responding (re-voicing) and follow-through, possibility broad and challenging question [arms and palms open]**
3. Natalie: If I am good, everybody will be good with me too. **Question-responding (reasoning), being imaginative and self-determination (meta-cognition: strategy use) [head-nod]**

I responded to the children's contributions usually re-voicing their utterances in order to show my approval and emphasise their ideas, looking directly into their eyes and doing hand gestures, as evident in the next extract from episode 4:

1. Emily: I was watching many happy people and I was turning them into sad! **Question-responding (clarifying), being imaginative, intentionality, risk-taking, self-determination and innovation (unusual connection-making)**
2. Teacher (T): So you were making them sad... Very good reasoning for the darkness witch. I liked it very much! Who else would like to speak? Demy. **Responding (re-voicing), affirmative feedback (acceptance of alternative ideas, praise and gratification) [index finger and thumb touching at tips and moving]**
3. Demy: *(she's pretending stirring and the other children are raising hands to guess)* **Non-verbal/silent question-posing ('as if'), being imaginative, action and self-determination**
4. T: Could you also tell us what you are because we are going to be late if we guess? **Service, clarifying and possibility broad question and feedback (management of time)**

5. Demy: Eh, madam, since it is spring time... during spring we use to clean the house in order to shine, we use to put flowers in order to smell nice... **Question-responding (reasoning), innovation, intentionality and self-determination [head-nod]**
6. T: Nice...and? **Affirmative feedback (praise) and follow-through, challenging and possibility broad question**
7. Demy: Eh, I am a housewife! **Question-responding (clarifying) and self-determination**
8. T: You are a housewife! And what have you been seeing from the sky? **Responding (re-voicing) and service, clarifying possibility broad question [flat hand move next to the head]**
9. Demy: Ehhh...
10. T: Have you been seeing dirty houses and wanted to clean them up? **Responding (suggesting) and modelling reasoning [eye contact]**
11. Demy: Yes! **Question-responding (accepting) [laughing]**

I praised the children's ideas using hand gestures and also showed the feelings of surprise and gratification using facial expressions (big eyes and mouth, smile) in order to communicate my affirmative feedback to the children, empower them and make them feel proud and self-confident. It is evident that praise was usually followed by provocation to prompt children to physically demonstrate their ideas and thus communicate them in a more understandable way. Some examples of affirmative feedback and provocations can be shown in the next extract from episode 2:

1. Stella: I was the fairy of the water and I got into the desert! **Question-responding (building on previous contributions), being imaginative, intentionality and self-determination (choices) [head-nod]**
2. T: Oh, my goodness! Let's watch it! **Affirmative feedback (surprise) and provocation [big eyes and mouth]**
3. Stella: I got into the desert and I was sweating! (*she's moving hands like it's hot*) **Being imaginative, self-determination (decision-making) and intentional action**
4. T: Ouf!!! (*they all imitate*) Very nice. Mary? **Affirmative feedback (praise) and provocation [miming giving emphasis]**
5. Mary: I travelled to mythology and I was a goddess, the goddess of beauty. (*she's swinging mincingly*) **Question-responding (describing), being imaginative, intentionality, self-determination (confidence) and innovation [head-nod]**
6. T: Wow! **Affirmative feedback (surprise and praise) [big eyes and mouth]**
7. Mary: And I was on the clouds and I was throwing snowflakes down to earth. **Question-responding (completing and building on previous contributions), being imaginative, intentionality, self-determination (decision-making) and innovation (unusual connection-making)**
8. T: Wow! Show us! **Affirmative feedback (surprise, praise and gratification) and provocation [big eyes and smile]**

When I would like the children be quieter I used my finger touching my nose. When I was listening to the children, I was observing them carefully and doing head-nods in order to show acceptance of their contributions.

4.2.3 Phase 3 of the DG

The close analysis of two critical incidents from the third phase, coming from DG lessons by both the teachers, surfaced the following categories of teacher talk and body language by commonality sequence (Table 12):

Teacher talk	Episode 5	Episode 6	Total	Teacher body language
FEEDBACK			11	
Gratification	1 5	1	7	head-nod, smile, applause
Praise	1	1	2	head-nod
Surprise	1		1	big eyes and mouth
Management of quietness	1		1	clapping
QUESTION-POSING			2	
Challenging questions	1	1	2	facial expressions, hand-arm gestures
PAUSES			NA	
Listening and observing				observing carefully, joining hands together, looking around, scratching the chin

Table 12: Teacher talk and body language in Phase 3 of the DG

In the third phase I let the children try to answer my challenging questions through their collective improvisational acts. In order not to disturb them I used some non-verbal forms of feedback (see red numbers in Table 12); I mainly showed the feelings of gratification and surprise through facial expressions (smile, big eyes and mouth) and praised the children using head-nods, as we can see in the following short extract from episode 5:

1. Andrew: We have to tell the president to buy better trains: including first aid, at least one shelter and a big room for special occasions. Does anyone have a mobile phone? (*asking the audience*) **Being imaginative, self-determination (decision-making, confidence, strategy use, spontaneity), intentional action, innovation and question-posing ('as if')** [head-nod, big eyes and mouth]
2. Audience: (*someone pretends giving him a phone*) **Intentional action** [looking around; clap for quietness]

3. Andrew: Yes... After a year? Are you crazy? So long! (*speaking to the president and then throwing the imaginary phone on his desk*) **Question-posing (negotiating), being imaginative, self-determination (decision-making and confidence), risk-taking, intentional action and innovation [smile]**

At a moment when the children were not very quiet I clapped to stimulate their attention to the act. While observing and carefully listening to the children's acts I joined my hands together in order to be more concentrated.

In episode 6, the participant teacher also let the children try to answer a challenging question through their collective improvisational act. Once they finished he praised them and showed gratification using head-nod and applause, as evident in the following extract:

1. Marina: Kids, come on! I think we're done! Now we have to cover the hole with the clouds and the sun. Hurry up! I'm going to bring the clouds, ok? You (*speaking to Dina*) bring the sun and you (*speaking to Nic*) help me to bring the clouds. **Being imaginative and self-determination (meta-cognition: strategy use)**
2. (*Marina and Nic use their blue ribbons to bring the clouds and put them onto the hole, while Dina pretends that she carries something very heavy using a yellow ribbon*) **Being imaginative and intentional action**
3. Dina: I've brought it!
4. Marina: Nice. (*she takes the yellow ribbon and throws it onto the imaginary hole*) We're done! **Intentional action**
5. Teacher: Bravo! Very nice, bravo! **Affirmative feedback (praise and gratification) [head-nod and applause]**

The teacher was carefully observing and listening to the children's performance; at a moment he scratched his chin perhaps indicating attention and interest to understand their ideas.

4.2.4 Phase 4 of the DG

Concerning the final phase of the DG, the detailed analysis of two critical incidents, also coming from DG lessons by both the teachers, surfaced the following categories of teacher talk and body language by commonality sequence (Table 13):

Teacher talk	Episode 7	Episode 8	Total	Teacher body language
PROVOCATIONS			9	
Provocations for imagination and action	1	8	9	lifting arms up with palms open, giving hands, open arms and palms, hand waves, head movements, miming
RESPONDING			9	
Re-voicing		7	7	eyebrows up
Completing		1	1	eyebrows up
Prompting		1	1	eyebrows up
FEEDBACK			7	
Praise	2	1	3	head-nod
Gratification	1	2	3	smile, head-nod, eye contact
Surprise	1		1	big eyes
QUESTION-POSING			4	
Challenging questions		3	3	eyebrows up, head-nod
Process questions	1		1	looking around
MODELLING			3	
Modelling empathy		2	2	facial expressions
Modelling reasoning		1	1	hand waves
PAUSES			NA	
Listening and observing				observing carefully

Table 13: Teacher talk and body language in Phase 4 of the DG

In the final phase the teachers mainly prompted children’s imagination and action and revoiced the children’s contributions offering affirmative feedback. They also posed challenging and critical questions to stimulate a whole-class discussion and modelled empathy and reasoning.

Particularly in episode 7, I posed a process question for the children’s feelings during the DG and looked around to see which child would like to respond. I showed the feelings of surprise and gratification through facial expressions (big eyes, smile) in order to communicate my affirmative feedback to the children. During the children’s participation I was observing carefully and doing head-nods in order to show them acceptance of their contributions.

In episode 8, the participant teacher decided after the discussion to prompt children to move again in the space, assume roles and use their bodies to find solutions to certain problems. He

was thus offering provocations to the children using hand gestures, arm and head movements and miming. He also modelled empathy using facial expressions, as we can see in the extract below (line 5). Finally, he responded to the children's contributions re-voicing their utterances and showed his gratification using head-nods and direct eye contact.

1. T: And since you are down to the floor, move like little colourful fish and enjoy the water! **Provocation** [small hand wave; head tilted to the side]
2. *(children are moving smoothly like fish in various ways)* **Being imaginative, intentional action and self-determination (spontaneous expression)**
3. T: And while enjoying the water, the fish, turning their little eyes upwards, suddenly see the water becoming black! **Provocation** [turning his gaze upwards]
4. *(children express their disgust using their face and body and making sounds)* **Being imaginative, intentional action and self-determination (spontaneous expression)**
5. T: They feel an awful taste in their mouth. They have to do something, because if they keep drinking this water they will finally be dead! **Provocation and modelling empathy** [facial expression for 'awful'; arms and palms wide open]
6. *(children are moving their hands and doing desperate attempts to rescue)* **Being imaginative, intentional action and self-determination (spontaneous expression)**
7. T: So now, we are doing a big chain... **Provocation** [giving hands; walking to turn the music down]
8. *(children are getting up, create a circle and try to make a chain using their ribbons)* **Being imaginative and intentional action**
9. T: Now we can name this chain! **Leading, possibility broad, challenging question** [eyebrows up]
10. Katie: Life chain! **Question-responding (hypothesising), being imaginative, innovation and self-determination (choice)**
11. T: Say it all loudly! **Responding (prompting) and affirmative feedback (gratification)** [eyebrows up; eye contact]
12. All: Life chain! **Question-responding (repeating)**
13. T: A life chain! How can we call it differently? **Responding (re-voicing) and service, possibility broad, challenging question** [eyebrows up; head-nod]
14. Anastasia: Friendship chain. **Question-responding (hypothesising), being imaginative and self-determination (choice)**

The above two critical incidents are exemplars from different activities that can take place during the final phase of the DG, such as a reflective discussion in a circle and a movement activity for feeling the extent of a problem and finding shared solutions.

4.2.5 Summary

Teacher talk in the DG was characterised mainly by elements of affirmative feedback, provocations and possibility broad questions and to a lesser extent by modelling, as summarised in Table 14:

Teacher talk	Phase 1	Phase 2	Phase 3	Phase 4	Total	Teacher body language
Feedback	3	31	11	7	52	eye contact, big eyes and mouth, squeezing lips, smile, head-nod, index finger and thumb touching at tips and moving, finger on the nose, clap and applause
Provocations	7	16	0	9	32	eye contact, smile, head tilted backwards, head moves, hand on chest, open arms and palms, crossing arms, clap, finger noting, finger pointing to the air, touch on the child's head with the hand, lifting arms up with palms open, giving hands, hand waves, miming, close proxemics
Responding	5	16	0	9	30	eye contact, eyebrows up, smile, facial expressions, head-nod, head tilted a little backwards, hand moves, finger pointing to the air
Question-posing	4	13	2	4	23	eye contact, looking around, big eyes, eyebrows up, facial expressions, head-nod, head tilted backwards, clap, hand moves, palm up and moving up and down as if weighing, miming with arm movements

Modelling	6	2	0	3	11	eye contact, facial expressions, arm movements, hand waves, miming
Pauses					NA	observing carefully, looking around, head-nod, touching the children, joining hands together, touching nose, scratching chin, walking, close proxemics

Table 14: Summary presentation of teacher talk and body language in the DG

Modelling was prominent in phase 1 perhaps because the teachers wanted to provide the first scaffolds for the children’s learning and frame the imaginative context. Then, provocations and challenging questions were prominent in phase 2 perhaps in order to challenge the children’s exploration in imaginative and real spaces. Responding and feedback were also prominent in phase 2 probably in order to motivate children to continue their exploration and participation in the activity. In phase 3 provocations, modelling and responding were absent possibly because it was the children’s time to get on the stage. In the final phase provocations and responding were prominent perhaps because the teachers aimed to provoke discussion and analysis and respond with affirmative feedback.

Body language accompanied and sometimes replaced certain categories of talk. It appeared to enforce the teacher talk, for example situating the children in imaginative contexts (provocations or modelling) and persuading them of the genuine nature of their teacher’s feedback (for example eye contact and applause in praising). Provocations and question-posing were the types of talk found as accompanied by the richest body language, perhaps because they are behaviours that mediate children’s learning. The teachers used eye contact in all forms of interaction with the children, possibly indicating an authentic, responsive and caring pedagogy. Also, hand-arm gestures were evident in all forms of pedagogy, possibly in

an attempt to communicate more messages using shapes. There were also moments when the teacher was not talking but manifesting active listening and observing using his/her body to provide responsive feedback to the children. Some examples from the episodes were the use of head-nods for supporting the children's utterances, the use of big eyes and mouth for expressing the teacher's surprise for something interesting or unusual and the use of smile for showing the teacher's gratification for the children's performance. We are now going to see in more detail the relationship of the teacher talk and body language with the children's PT.

4.3 The relationship of teacher talk and body language with children's PT

In an attempt to track the development of the interaction between the teacher and the children, we will revisit the four phases of the DG now focusing on the relationship between certain aspects of teacher talk and body language and features of children's PT.

4.3.1 Phase 1 of the DG

Analysing episode 1 from a lesson organised by the participant teacher, I have found that the children acted both intentionally responding to the teacher's provocations and also spontaneously, probably expressing their needs and interests, and manifesting a degree of self-determination. They also expressed multiple hypotheses verbally, perhaps prompted by the teacher's reasoned provocations. The affirmative feedback provided by the teacher expressed a level of responsiveness to the children's actions. The teacher's facial expressions and mime helped him frame the imaginative context in order to stimulate children's imagination. For example, when he used the provocations for 'painting an ugly grey wall' and 'cleaning a sunless dirty room' he used facial expressions of disgust, as we can see in the following extract from episode 1:

1. Teacher (T): The ribbon in our hands turns into a brush to paint an ugly grey wall. Let's make it colourful, beautiful... Bravo! Do it well... **Provocation, modelling reasoning and affirmative feedback (praise) [open arms and palms; facial expression for 'ugly']**
2. *(children are moving their ribbons with various ways)* **Being imaginative and self-determination (spontaneous expression)**
3. T: Using the other hand we are making various shapes on the wall, with different colours... **Provocation [hand waves]**
4. *(children are moving their hands in front of an invisible wall in their own way)* **Being imaginative, intentional action and self-determination (spontaneous expression)**
5. T: Now we are getting in a sunless dirty room where nobody can live and our ribbon becomes... What may the ribbon become? **Provocation, modelling reasoning and service, possibility moderate, critical question [crossing arms; head tilted a little backwards; facial expression for 'disgust'; clap and big eyes]**
6. Max: A broom! **Question-responding (hypothesising)**
7. T: A broom in order to clean up, hurry! **Responding (completing) and modelling reasoning [arm movements right and left miming]**
8. *(children are pretending cleaning the floor with various ways)* **Being imaginative, intentional action and self-determination (spontaneous expression)**

However, the imaginary context was created both by the teacher and the children combining his provocations with their spontaneous expressions in an 'as if' space. Two boys in the children's VSR asserted that they liked this DG, in which they used ribbons in the first phase, because it was a fantasy play and they could move easily. The teacher in the VSR session noted that the variety of kinaesthetic activities used was more likely to touch and motivate every child to participate and learn. It seems that there was a playful and immersive context, since all the children participated and had fun. The teacher was often saying the word 'now' in order to stimulate attention and curiosity and his provocations seemed to have fostered the children's sensory immersion; they made use of all their senses assuming various roles and this might have facilitated their perception and empathy. Thereby, this exploration on the part of the children in the first phase of the DG might have fostered their PT throughout the lesson.

4.3.2 Phase 2 of the DG

As can be seen in the following two extracts from episodes 2 and 3 respectively, the children, although building upon previous contributions by the teacher (me) and their classmates, they finally made their own choices enacting self-chosen imaginary/fantasy roles. This collaborative play was open to possibilities, as we can see in line 6 below, when I opened my arms and palms to accept the child's initiation:

1. Mary: I travelled to mythology and I was a goddess, the goddess of beauty. (*she's swinging mincingly*) **Question-responding (describing), being imaginative, intentionality, self-determination (confidence) and innovation [head-nod]**
2. T: Wow! **Affirmative feedback (surprise and praise) [big eyes and mouth]**
3. Mary: And I was on the clouds and I was throwing snowflakes down to earth. **Question-responding (completing and building on previous contributions), being imaginative, intentionality, self-determination (decision-making) and innovation (unusual connection-making)**
4. T: Wow! Show us! **Affirmative feedback (surprise, praise and gratification) and provocation [big eyes and smile]**
5. (*non-verbal/silent question about whether it is acceptable to lay down*) **Question-posing ('what if?')**
6. T: Do whatever you want! **Provocation [arms and palms open]**
7. Mary: I was on the clouds and I was doing like that... (*she's lying down and moving arms and fingers up and down*) **Being imaginative, self-determination (decision-making) and intentional action [head-nod]**

My possibility broad challenging questions to the children, asking them to declare their personal important and useful characteristics, and me being in the role of a fairy perhaps challenged children's imagination and prompted them to explore various possibilities. Their final decisions seemed to manifest identity issues related to personal values, as for example the well-paid job stated by Mike as being the useful outcome of his farcical/comic character (line 3 below):

1. Mike: I've got the characteristic of farcical and I can make Andrew and others get angry! **Question-responding (describing), self-determination (choices), intentionality and risk-taking [smile and eye contact]**

2. T: Wait a minute. I like farcical, but is it only to make others get angry? **Responding (evaluating) and follow-through, challenging and possibility broad question [head tilted a little backwards]**
3. Mike: No, no. It can help me get money. Let's say, the president may hire me, like kings use to have zanies, and give me salary for that! **Question-responding (hypothesising and reasoning), being imaginative, self-determination (confidence and strategy use) and innovation (unusual connection-making) [head-nod and big mouth]**
4. T: Very nice. **Affirmative feedback (surprise and praise)**

My challenging questions and affirmative feedback provided verbally or non-verbally (head-nods, big eyes and mouth, smile) seemed to have stimulated children's innovative contributions, for example Mike's idea for being employed by the president to make him laugh.

In episode 4, I accepted Emily's alternative idea for assuming the role of a mean witch showing gratification with a smile. This affirmative kind of feedback perhaps prompted the following children to build upon their classmates' contributions and make original connections between ideas. Thus we can hypothesise that children's choices were co-determined by themselves, the teacher and some classmates in a collaborative immersive context. The possibility broad leading questions about imaginary identity and vision rather have led the children reveal their intrinsic interests, needs, desires and values and manifest in this way self-determination. Later, as shown in the extract below, when I suggested Demy clean the imaginary dirty houses, I think that I delimited the child's self-determination and personal route-finding and restrained her independence in decision-making. Perhaps it would be better to allow more time for the child to think and participate again later.

1. Demy: *(she's pretending stirring and the other children are raising hands to guess)* **Non- verbal/silent question-posing ('as if'), being imaginative, action and self-determination**
2. T: Could you also tell us what you are because we are going to be late if we guess? **Service, clarifying and possibility broad question and feedback (management of time)**

3. Demy: Eh, madam, since it is spring time... during spring we use to clean the house in order to shine, we use to put flowers in order to smell nice... **Question-responding (reasoning), innovation, intentionality and self-determination** [head-nod]
4. T: Nice...and? **Affirmative feedback (praise) and follow-through, challenging and possibility broad question**
5. Demy: Eh, I am a housewife! **Question-responding (clarifying) and self-determination**
6. T: You are a housewife! And what have you been seeing from the sky? **Responding (re-voicing) and service, clarifying possibility broad question** [flat hand move next to the head]
7. Demy: Ehhh...
8. T: Have you been seeing dirty houses and wanted to clean them up? **Responding (suggesting) and modelling reasoning** [eye contact]
9. Demy: Yes! **Question-responding (accepting)** [laughing]
10. T: Nice! Well, I repeat the question: We are saying what we had been and what we had seen in our trip. **Leading, process and possibility broad question** [palm up and moving up and down as if weighing]
11. Helen: Madam, I cannot do the move... I was a good witch and when I saw the rainbow which Emily had made black before I flew above it; I slipped like I was on a slide and managed to clean it! **Question-responding (building on two previous contributions), self-determination, intentionality, being imaginative and innovation (unusual connection-making)** [head-nod; big eyes and biting lips]
12. T: Fantastic! Are you sure you can't do it? Try. **Affirmative feedback (praise) and service, challenging and possibility moderate question** [eye contact]
13. Stef: I can do it! (*moving to the centre of the circle*) **Self-determination** [head tilted to the side]
14. T: I think she can do it, Stef! **Responding (compensating)** [head-nod]
15. Helen: (*jumps, slides and yells 'wiii'*) **Intentional action, risk-taking, being imaginative** [smile]
16. T: Very nice. Let's do it... **Affirmative feedback (praise) and provocation**
17. (*everyone imitates the move his/her own way*) **Intentional action** [miming]

Coming to the end of the episode, we can see that my talk and body language was found helpful to another girl, Helen. I provided a challenging provocation manifesting truthful expectations from the girl as well as trust through the direct eye contact; these may have advanced the girl's self-confidence and led her try the risky move (line 11 and 15). The responsive character of my behaviour perhaps created a safe atmosphere for the children to participate and create their own imaginary/fantasy world.

Based on the episodes 2, 3 and 4 from two lessons I organised, it can be noticed that at the beginning of the second phase I was asking a possibility broad challenging question. Then, offering time to the children to respond, I tried to be considerate; I allowed children express

their feelings without evaluating negatively their contributions and asked follow-through questions to broaden their possibilities and challenge their thinking and emotions. My body language and particularly close proxemics, touch on the head and direct eye contact with the contributor perhaps facilitated children's self-confidence to participate and attempt to take risks in a safe environment. The feeling of a safe community was perhaps also supported by the use of 'we' in my talk, as I noted in the teacher's VSR. I also mentioned the issue of flexibility as a necessary condition for the teacher in order to respond to the children's unpredictable contributions. I added that continual affirmative feedback on my part (praise, surprise, gratification) in the circle setting perhaps had prompted children to think of something different and more impressive to say and do in their turn exploring various possibilities. Active listening and observing during my pauses rather seemed to have prompted the same behaviour on the part of the children, helping them make sense of the activity and perhaps be able to determine their own actions. Their imaginativeness was rather stimulated by my provocations and then the open space of imagination was probably found helpful for the manifestation of innovative ideas.

4.3.3 Phase 3 of the DG

At the time of the children's collective improvisations the teacher's presence by the side listening, observing and providing affirmative feedback was evident through body language (head moves, smile, big eyes and mouth, applause) and this approach seemed to have encouraged the children to express their thoughts and feelings. In episode 5, my possibility moderate but critical/challenging leading question about how to react after an earthquake in a train framed the general problem so that the children have a base to work on, as Maria and Andrew agreed in the VSR session:

- Researcher: Did the teacher help you during the DG and if yes, how?

- Maria: You helped us giving some guidelines about the problem...

- Andrew: Thank God for creating the teachers!

The following example shows clearly how the teacher's challenging question at the beginning of the third phase affected children's intentional action. The participant teacher in lesson 5 had asked a possibility moderate but challenging leading question in order to stress children's thinking about solving problems responsibly. After a whole-class discussion about various problems in the world, the teacher asked the children to choose one out of the following four categories: sky, sea, earth and people. Therefore four groups were formed and each group had to decide on which problem to work on. The children of the group presented in episode 6 had chosen the problem of the ozone hole, as we can see in the following extract:

1. Marina: Kids, we've got a big problem! We can't live with this problem anymore! We have to find a solution. The ozone hole gets bigger and bigger. We have to go to the diviner to tell us what to do.
Question-responding (problem-finding), being imaginative, self-determination (decision-making) and intentionality [observing carefully]
2. Dina and Nic: Ok!
3. (*Dina, Marina and Nic walk on a red cloth*) **Being imaginative and intentional action**
4. Marina: Excuse us for disturbing you. We've got a problem: Humans have increased the ozone hole and we can't stand it! We are fairy-guards. We can't do anything because nobody on earth can see or listen to us. Could you suggest something? **Question-posing ('as if'), being imaginative and self-determination (meta-cognition: strategy use) [scratching his chin]**
5. Manos: I think I've got something helpful. This little bag contains garlic powder. Go and throw some onto the people's cigarettes; it will not taste good so they will stop smoking! (*he gives them the bag*)
Question-responding (problem-solving), intentional action, being imaginative, innovation and self-determination (meta-cognition: strategy use)
6. Dina, Marina and Nic: Thank you! (*Marina takes the bag*)

The children used their imagination to assume roles that relate to the sky and collaborated in order to find a solution to such an important problem. Based on Marina's fantasy story the four children discussed in order to choose their roles and actions for their group improvisation. Their actions seemed to have a clear goal, thus their main PT characteristic in this extract was

intentional action. Marina and Manos also performed a great deal of self-determination using strategies and making decisions for moving the story forward. We can thus see that the teacher's pauses have provided the opportunity to the children play and explore their collaboratively-chosen issue posing and responding to questions in their group (lines 1, 4 and 5). In this way the teacher became able to detect their potential misconceptions and at the same time be aware of their worries and interests.

4.3.4 Phase 4 of the DG

Analysing two episodes (episodes 7 and 8) from the final phase of the DG, each with a different teacher, it can be noted that the leading process question asked by the teacher opened a broad spectrum of possibilities for the children to respond. They were prompted to reflect on the whole process of the DG from the beginning until the end, express their emotions, justify their answers and provide reasons for their decisions. This process of reflection is a meta-cognitive skill which can help the development of self-awareness and thus self-determination in learning.

The last episode, coming from a lesson organised by the participant teacher, offers another aspect of how the teacher's pedagogy in the final phase of the DG can contribute to the children's PT. The provocations and modelling of empathy on the part of the teacher appeared to have motivated the children's imagination and empathy, as it is evident in the extract below:

1. T: Each ribbon can become a flame which is hunting others in order to burn them. **Provocation and modelling reasoning [hand wave]**
2. *(some children are doing quick violent movements)* **Being imaginative, intentional action and self-determination (spontaneous expression)**
3. T: And each one that is being burnt can show his/her feelings through a facial expression! If a flame burns you, show how you feel using your face and body! **Provocation and modelling empathy**
4. *(some children are reacting lively and are shouting; some of them are getting on the floor)* **Being imaginative, intentional action and self-determination (spontaneous expression)**

5. T: And since you are down to the floor, move like little colourful fish and enjoy the water! **Provocation [small hand wave; head tilted to the side]**
6. *(children are moving smoothly like fish in various ways)* **Being imaginative, intentional action and self-determination (spontaneous expression)**
7. T: And while enjoying the water, the fish, turning their little eyes upwards, suddenly see the water becoming black! **Provocation [miming: turning his gaze upwards]**
8. *(children express their disgust using their face and body and making sounds)* **Being imaginative, intentional action and self-determination (spontaneous expression)**
9. T: They feel an awful taste in their mouth. They have to do something, because if they keep drinking this water they will finally be dead! **Provocation and modelling empathy [facial expression for 'awful'; arms and palms wide open]**
10. *(children are moving their hands and doing desperate attempts to rescue)* **Being imaginative, intentional action and self-determination (spontaneous expression)**

Once the teacher said the word 'flame' the children started to do some violent movements and live bodily reactions and some of them started to shout. Once he prompted them to swim like fish which enjoy the water, they were doing smooth movements and happy facial expressions. Then, once he referred to an awful taste in the water they showed their disgust with bodily reactions and sounds and finally, once he mentioned the threat of death they immediately engaged in some rescue movements and sounds. The teacher's own body language while provoking (hand-arm gestures and facial expressions) might have stimulated empathy more and modelled miming, but at the same time might have guided children's imagination to certain paths. However, the spontaneous physical expressions of each different child perhaps indicated examples of self-determination in a playful and immersive context. The extrinsic motives seemed to have been internalised through empathy. After this activity, the teacher asked the children to create a chain giving his hands to make a circle. He posed the possibility of a broad question to name this chain and then each contribution operated like a link in a 'community chain', as evident in the aforementioned episode 8. All the links together seem to have created a chain of respect to the self and to the environment. The teacher's re-voicing of the children's suggestions for names and his affirmative feedback might have being

interpreted as approval and thus created a flexible and safe context. So, the children continued to recommend new names for their chain, finding by this way some useful ways for solving world problems: friendship, love, happiness, peace, magic, solidarity, colour and respect.

4.3.5 Summary

Summarising the findings from all the phases of the DG, each of the main categories of teacher talk are connected to some of the children's PT features:

- a) Responsive affirmative feedback (praise, surprise, gratification) and responding (mainly re-voicing, clarifying and completing)

The teachers responded to the children's questions explaining or clarifying in order to stretch their ideas. Re-voicing the children's utterances during the second or the fourth phase, the teachers indicated their approval of ideas, while completing them was an opportunity for modelling reasoning. The continual affirmative feedback seemed to have promoted children's confidence and fostered their self-determination in the activity. It prompted intentional action and risk-taking and sometimes nudged innovation. Particularly praise using head-nods, positive surprise using big eyes and mouth and gratification using a smile on the part of the teacher perhaps have prompted the students' will to find something unusual to say or do.

- b) Provocations (provocations for imagination and action, prompts for reflection)

The teachers in all the phases used provocations in terms of guidance for action in an imaginative context. They framed this context using various hand-arm gestures and miming and this appeared to have motivated students to act (i.e. move, play, imitate, mime) making connections and being original in many cases. The teachers also used prompts for reflection. Some children in the interviews agreed that without the teacher's guidance there would be

chaos in the classroom. The teacher's initial stimuli seemed to have framed the development of their PT.

- c) Question-posing (mainly possibility broad: challenging, clarifying, critical, and process questions)

In the second and third phase of the DG the teachers asked possibility broad leading questions which seemed to have increased the space for imagination and multiple hypotheses on the part of the children. The open questions may have fostered children's self-determination to explore possibilities and generate alternative ideas. Openness was enriched by open arms/palms and smiles and seemed to help children respond to questions/problems using their imagination and being confident to make their own choices and decisions, manifesting in some cases risk-taking. Sometimes they generated innovative ideas because of one another, indicating collective PT. The challenging, clarifying, critical and process questions articulated across all the phases of the DG perhaps stimulated the children's thinking and prompted reflection and strategy use, which seem to be important aspects of self-determination. It is although important to note that it is not the number of questions posed by the teacher that mattered but their degree of possibility.

- d) Modelling (role-modelling, modelling empathy, modelling reasoning)

I used miming to role-model in order to stimulate children's imagination and intentional action. The participant teacher argued in the interview that he would assume a role if the children asked him to do so. However, both teachers modelled reasoning in the first two phases and sometimes they modelled empathy using their voices, facial expressions and hand-arm gestures. Modelling may have been useful for children that are less confident to express themselves.

e) Pauses (listening and observing the children)

During periods of time when the teachers stood back, listened and observed the children's contributions, the children became agents of their own learning and determined the development of the lesson based on their needs and interests, whilst simultaneously making use of their imagination. This happened in every phase of the DG but especially in the third one when the teachers' pauses were the most extensive.

Overall, it could be argued, on the basis of the evidence presented and analysed, that in the DG the teachers seemed to co-construct the activity alongside and with the children in a way that indicates collective PT amongst adult and children. A main concept deriving from this study is the interplay between teacher talk and body language on one hand and children's PT on the other hand. The teacher's possibility broadening communicative style (PBCS) seemed to have played an important role in eliciting and fostering children's PT and at the same time the children's contributions influenced the teacher's PBCS in the open, playful, immersive and collaborative context of DG which values physical engagement. We are now going to discuss these findings in the light of the related literature.

5 Discussion

In this chapter I discuss the findings of my research study and raise connections to the literature. The study focused on three research questions concerning the features of children's PT, the types of teacher talk and the relationship between teacher talk and children's PT during the DG. In each section I revisit the findings regarding these research questions and discuss them in relation to previous PT work and other related literature. In section 5.3, I also discuss the role of the enabling context of DG in nurturing PT in the classroom and the interplay which emerged between teacher talk and children's PT; examining the relationship between these two strands was the final research question.

5.1 The features of children's PT in the DG

In this section I discuss in more detail how each PT feature was documented in my study through the videos and VSR sessions with teachers and children. Children's voice in the VSR was a new addition in my research in relation to previous PT studies, and it was found to be valuable as it enabled their views about the activities and their comments/explanations about their behaviour (talk, physical engagement, influence of the teacher pedagogy and enabling context) to be heard.

The order I used for reporting the PT features in the previous Findings chapter related to their commonality in the critical episodes. However, it is important to note that the importance of each PT feature may be not determined by its commonality in the data. For example, whilst self-determination was the most common feature in the data of my study, through a careful

reading of the episodes it can be seen that it related to question-responding and intentional action in a context that promoted imagination and co-determination of choices. Also that these PT features were usually driven by the teachers' possibility broad questions, provocations and affirmative feedback to the children. The teacher's possibility broad questions seemed to frame the imaginative space for the children, enabling them to respond and thus have the confidence to choose or decide about their actions, sometimes spontaneously and sometimes after reflection and strategy use. Hence I will now discuss the PT features, presented in a potential order of significance for fostering PT.

Question-responding and question-posing: Children responded to the teachers' questions making 'what if' hypotheses, building upon previous verbal and non-verbal contributions, negotiating, clarifying, reasoning and sometimes managing to solve collaboratively-found problems through enactment. Children's question-responding and to a lesser extent question-posing were found to be driving features in the collaborative context of DG, in relation to their teacher and/or their peers. Question-responding was prominent in phase 2 during which the children explored issues more, usually in a safe circle setting. Question-posing was not documented to such an extent and was absent in phase 4 of the DG, perhaps because the teachers did not allow children time for questions, as discussed in sub-section 4.1.4, and also due to the fact that peer to peer questions in phase 2 were not documented. This was a weakness in this study since I was unable to investigate the discussions of the small groups while preparing their performances. However, the relatively infrequent coding of question-posing does not necessarily mean that it was not important in this context. Question-posing has been previously analysed as a key driver of PT not because it was more common but

because of the potency of asking questions as part of the PT process (Chappell *et al.*, 2008); PT has been especially seen to be driven by the posing of the question ‘what if?’ in multiple ways and contexts, together with perspective-taking, or ‘as if’ thinking (Cremin, Chappell, and Craft, 2013). In my study children’s question-posing was prominent in phase 3, which is the time of the group improvisational plays, perhaps because group work may foster peer questioning; this was documented in ‘what if’ questions, ‘as if’ questions (in-role) and in the form of negotiating meanings both verbally and physically, supporting and extending previous PT empirical work on questioning (Chappell *et al.*, 2008), demonstrating how possibility broad questions on the part of the children can be posed verbally and non-verbally in the classroom.

Imagination: In the DG the children manifested verbal and non-verbal forms of imagination combining spontaneous expressions with intentional actions. Both children and teachers were in an ‘as if’ space and assumed imaginary roles in their imaginatively co-created worlds. Imagination was prominent in phases 2, 3 and 4 perhaps because through collaboration ideas started to flow and a collective imaginary world was created and then manifested through talk and physical engagement. Imagination was strongly evident across the data probably because DG in and of itself is an experience that opens the doors of imagination. What may be difficult for researchers and teachers is not only the documentation of imagination in the classroom but finding ways to foster it. If children are able to represent images which are not present to the senses but beyond current time and place using their verbal and non-verbal language and other action, then what we have as teachers to do is enable them to use their imagination to make connections. Vygotsky (2004), in his work on imagination and creativity in childhood, argued

that imagination can be defined as the ability of the human brain to combine elements and thus not only reproduce past experiences, but create new images or actions for the future. He saw this as the basis of every creative activity. The findings of my study are consistent with this conceptualisation of imagination, as a fundamental feature of everyday creativity and PT in particular, echoing the results of other PT studies (Burnard *et al.*, 2006; Craft *et al.* 2012a, 2012b; Chappell *et al.*, 2008; Cremin *et al.*, 2006, Cremin *et al.*, 2013).

At this point it is important to note that my study found that children were using another thinking process not observed or documented in the multiple previous PT studies. This is empathy, and I argue that this feature may be considered as part of imagination. In my study when the children were in-role, and especially during phase 3 of the DG, they manifested empathy in an imaginative context. The children manifested empathy also out of role, in an endeavour to reflect on their in-role strategies during phase 4 of the DG. Whilst empathy may be a product of the drama context, this does not mean that it is not related to PT. In drama, participants work in-role, view others working in various roles, imagine they are someone else and react accordingly in this 'as if' world. This ability to think and feel what it might be like to be other than yourself, called empathy, is exercised through drama and can help us reflect on who we are and who we might become (Neelands, 2002). This conceptualisation of empathy has links with the evidence-based concept of PT, which initiates the transition from what-is to what might be (Craft, 2011).

Self-determination: The children in this study were seen as taking self-determined choices and decisions, usually with confidence, and combining spontaneous expressions (usually physical) with meta-cognitive skills (reflection and strategy use). These were frequently

combined with imagination, questioning and intentional action and sometimes with innovation and risk-taking. Self-determination was more evident in phases 2 and 3 probably because adult intervention was less evident at these phases; it was probably also influenced by the open, imaginative context which afforded space for children to create their own imaginative worlds. Furthermore, the domain of DG, in which play is interwoven with sensory exploration, movement and action, provided the opportunity to document some non-verbal forms of self-determination, enriching the research evidence of the previous PT studies suggesting possible modes of self-determination, such as enactment of self-chosen roles and other spontaneous expressions.

Self-determination, it is argued (Ryan & Deci, 2000), implies intrinsic motivation behind one's choices and decision-making; an active attempt to transform an extrinsic motive into personally endorsed motives. The findings of my study provide evidence on how extrinsic motives stimulated by the teacher through questioning, provocative behaviour and affirmative feedback, were becoming intrinsic to the child. This process of internalisation reinforces the socio-constructivist character of PT suggesting that self-determination can be fostered through co-determination of decisions with the teacher and classmates. This argument is in tune with Craft's (2000) assertion that creativity is self-working in relationship with self, others and the domain and that self-actualisation occurs in relationships when being creative.

Reading the literature in the field of self-determination I have also gained insights into the connections between this and meta-cognition. This was why I included evidence on meta-cognitive skills (processing-reflection and strategy use) into the coding of self-determination. For example, the children reflected on their personal thinking processes, feelings or actions and justified their usefulness (see episode 3). They also described the use of certain strategies

(see episodes 5, 6, and 7). Meta-cognition is considered as knowledge and control of one's thinking and learning implying self-awareness, self-evaluation and reflection and then decision-making for monitoring learning through strategy use (Askill-Williams *et al.*, 2012; Hargrove, 2012). The evidence-based examples from my study regarding reflection and strategy use extend the definition of self-determination in the published PT research to date, and reveal that children in phase 4 of the DG are able to reflect upon their strategy use and that such reflection is part of the process of self-determination, a critical feature of PT.

Intentional action: This feature, defined as activity/behaviour having a clear goal, was very common in the active, playful context of DG. Collaboration was found to contribute to the manifestation of intentional action raising the issue of social meaning-making through action. Intentional action was prominent in phase 3, where the collective improvisational acts took place, perhaps because the children attempted to present some actions to an audience that would try to understand their goals/intentions. It was though documented in all the DG phases, and usually manifest in relation to question-responding, imagination and self-determination and more rarely in relation to innovation or risk-taking.

Intentional action was also connected to physical engagement, while there were moments that children demonstrated only verbal intention for action, defined as intentionality in my study. These empirical insights expand further the features of intentional action and intentionality, expanding the PT work so far. The findings of this study categorised intentional action/intentionality as a core PT feature in the DG. However, this does not necessarily mean that there is no PT in a classroom if there is no intentional action; it may be a result of the active context of DG. What was important to recognise in the data was that children acting

intentionally, whether self-determined or co-determined and whether verbally or non-verbally, worked out possibilities in a creative process of learning. Previous PT work (Chappell *et al.*, 2008) has indicated that taking intentional action (coded action/intention) as well as autonomy and agency (coded self-determination) permeated the PT process rather than being core components. However, a recent PT study (Craft *et al.*, 2012a) with children aged 9-11 considered intentional action as an outcome of the PT process. Drawing on my data, I wish to argue that there may be a distinction between the process of co-determining intentions for actions in the classroom and the self-determined intentional action that may be an outcome of the creative process.

Innovation: Some of the children manifested innovative contributions, both individually and in their collective performances, although the documentation of innovation was difficult because of the children's simultaneous contributions in the activity. It was also hard to document innovative accomplishments in this small-scale study, because there was no opportunity for comparisons between present and past accomplishments and because the researcher did not know each individual well enough to identify what was innovative for them. Innovation, defined as unusual connection-making between ideas or novelty in words and actions in relation to other contributions in the same lesson, was found most prominently in phases 2 and 3 possibly because unusual outcomes can be more easily documented in collaborative activities. Innovation in this study is thus considered as a possible outcome of PT, echoing the results of previous PT studies (Chappell *et al.*, 2008; Craft *et al.*, 2012a, 2012b).

Risk-taking: This feature was manifested individually in the study, in the form of taking a risk to say or do something with some level of danger or fear, for example during personal exposure to the whole class. It was identified in relation to questioning, self-determination, imagination and sometimes intentional action and innovation. Risk-taking was only occasionally documented, though it was not absent as in Craft *et al.*, (2012a), that examined 9-11 year olds in two UK sites during science, mathematics and arts-based tasks. Risk-taking was totally absent in phase 4 of DG probably because this is mainly a reflective discussion phase. It was though evident in phase 2 during which the children explored various possibilities, usually in a safe circle setting, without the fear of failure. I think that PT can occur without risk-taking, but if someone take risks then it may be more possible to be innovative.

In this section I focused on children's PT features that were manifest in the examined DG lessons. Children's possibility broad questioning, imagination, self-determination, intentional action, innovation and risk-taking were evident in this study. In the next section I discuss the relationship of teacher talk and body language with children's PT in the DG, as evident across the data.

5.2 Teacher talk and body language in relation to children's PT in the DG

The teachers in this study used elements of what I call a 'Possibility Broadening Communicative Style' (PBCS), which seemed to be an essential stimuli for the fostering and manifestation of children's PT across all the critical episodes examined. The PBCS of the teacher was mainly characterised by possibility broad questions, provocations and modelling, affirmative feedback and pauses, both in verbal (talk) and non-verbal (body language) forms. It was evident that the teachers' PBCS combined challenge and support for the children. In the following sub-sections I discuss the evidence-based types of teacher talk which are part of their wider PBCS and link these to the literature. These will be discussed in the order of their perceived importance in nurturing children's PT in this study. I explain this perceived importance within the sub-sections that follow because this order is not consistent with the order of commonality, as presented in the Findings chapter. While, for example, affirmative feedback was the most common element in the findings, it appears from looking at the role of teacher talk in episodes that the teachers' leading questions were the driver for the children's PT. Affirmative feedback appeared to sustain the children's exploration of different possibilities; it did not appear to drive it. One must also bear in mind that each time the teachers posed a leading question to the whole class, they later provided feedback to each child. So the numerical frequency of the elements of the teachers' PBCS was not what mattered in relation to PT, but the nature of each element and their combination in the enabling context.

5.2.1 The teacher questioning stance

The teachers mainly asked possibility broad leading questions which seemed to increase the space for imagination and multiple hypotheses on the part of the children. It is though likely

that other elements of the imaginative DG context (for more detail see section 5.3 below) fostered children's agency to explore possibilities and generate alternative ideas. The children responded using their imaginations and were thus confident to make their own choices and decisions. These findings seem to agree with previous findings on the importance of the leading question (Craft *et al.*, 2012b) and add to this argument presenting the broad degree of possibility inherent in the leading questions as a key factor for fostering children's PT. Subsequent questioning, such as service and follow-through questions as in Chappell *et al.*, (2008), was also possibility broad or moderate and this seemed to have extended the children's PT. Even when the teachers asked possibility moderate questions, framing 'a real' context-place (for example the dirty room in episode 1 and the train in episode 5), the children's PT was again evident in their self-determined hypotheses and actions. An important note is that these possibility moderate questions may be characterised as challenging or critical. Possibility narrow questioning was manifest only once in the critical episodes (in episode 1), perhaps because DG is a relatively open 'what if' world full of possibilities.

The categorisation of teacher's questions as challenging, clarifying, critical and process questions contributes a more nuanced understanding of the questioning stance which is seen to be a core element of pedagogy that fosters children's PT (Cremin *et al.*, 2006). *Challenging questions* articulated across all four phases of the DG appeared to stimulate children's thinking and negotiations for problem-solving. While asking challenging questions, the teachers were opening their arms and palms and making facial expressions, which may have served to show their wonder and stimulate children to respond. This body language was prominent in phase 2 perhaps in order to challenge the children's exploration in real and imaginative spaces, stimulating their intentional action and risk-taking. It was sometimes also employed in response to innovative accomplishments. *Clarifying questions* identified in phase 2 of the DG

seemed to prompt explanations and reasoning on the part of the children. They were often accompanied by smile perhaps in order to soften the inquiry. *Critical questions* posed during phase 1 of the DG- about what a prop might become- appeared to have prompted children to make multiple hypotheses. They were asked with open arms and big eyes probably showing interest. Finally, *process questions* identified in phases 2 and 4, in the circle setting discussions, seemed to prompt children's reflection for describing and explaining their emotions or strategies, which are considered important aspects of self-determination. These questions were asked using arm movements that may have helped to explain the various procedures.

Questioning that challenges thinking and asks for reasoning has previously been seen as a characteristic of dialogic teaching (Alexander, 2008), though Alexander did not link this explicitly to creativity. My study offers examples of how teacher questioning which prompts reflection and reasoning may be connected to PT. Other studies have identified a gap in the documentation of questions that relate to children's higher order thinking such as reasoning and reflection (Myhill and Dunkin, 2005; Myhill, 2006). These authors argue that although the teachers in their study most often used factual questions with a predetermined answer, it is speculative questions (which invite opinions, hypotheses and imaginings and thus they are open) and process ones (which invite children to articulate their understanding and explain) that relate to higher order thinking. In DG many of the teachers' questions in phases 1, 2 and 3 were challenging and speculative in nature, since the teachers invited children's multiple hypotheses and imaginings in an open playful space, whilst those in phase 4 were also challenging but usually process-oriented. For example, in episode 3 (phase 2), after a girl had stated that her useful personality characteristic is that she feels joy and love for everyone, the teacher asked her how this can help her during her life, prompting her to justify the usefulness

of her characteristic. This follow-through, possibility broad and challenging question may be considered as speculative, because although it refers to real life, it invited the child's hypotheses having a future orientation. Additionally, in episode 4 (phase 2), the teacher asked the whole class to report in turn what they had imagined during their previous imaginative trip in the sky, which role they undertook and what they were seeing from there. This can also be characterised as a speculative question because it invited the children's imaginings and hypotheses based on these imaginings. In episodes 5 and 6 (phase 3), the teachers asked possibility moderate but speculative questions, since they had suggested general subjects for exploration and the children had the opportunity to imagine and hypothesise roles and relationships in order to respond to the subject/question through their collective improvisational acts. During phase 4 the teachers' questions were usually reflective and process-oriented, since it was the time to discuss experiences and feelings and also give reasons about them. For example, in episode 7, in a whole-class follow-up discussion, the teacher asked the children to express what they felt during the lesson and justify their answer. However, there were times in this last phase of the DG, when the teacher asked some possibility broad questions of a speculative nature, so that the children could express their feelings and at the same time find shared solutions to problems. For instance, in episode 8, the teacher asked the children, as they were all standing in a circle, to co-produce a chain and then name it, allowing multiple hypotheses to emerge. The children decided to use their hands and ribbons to produce the chain and at the end it was evident that, through the hypothetical names they gave to their chain, they expressed wishes for a better world, for example friendship chain, love chain, happiness chain, peace chain, respect chain.

5.2.2 *The teacher provocations and modelling*

Both the teachers, in phases 1, 2 and 4 of the DG, used provocations in terms of prompting narratives for imagination, action and reflection. This approach appeared to motivate students to learn exploring the imaginative space, making connections and acting intentionally (moving or miming), sometimes taking risks and being innovative. Provocations seemed to foster the children's sensory immersion in the activity; the children made use of all their senses in assuming various roles and this may have facilitated their perception and empathy. Some provocations seemed to prompt children to demonstrate their ideas and communicate them more easily and in an understandable way.

Provocations, along with question-posing, were the types of talk that were accompanied by the most layered body language. For example, opening arms and palms with smile and sometimes getting closer to the children and touching their head seemed to have welcomed and made them feel safe to participate. These findings are in alignment with the arguments of a previous PT study (Craft *et al.*, 2012b) that found provocations were important in fostering children's PT, together with an emphasis on emotional security and encouragement. The kinds of provocation identified in that study were imaginative narrative events, improvisational dramatic storymaking, and material for educating the senses. My study highlighted the role of teacher talk in prompting children to imagine and act, though it did not document any teacher-initiated narrative events in the analysed episodes and also did not focus on the role of props or other material as stimulus provocations. Future investigation concerning the above provocations in the DG is needed. In a recent study, narrative play was found central to the aim of fostering PT in the classroom, evidenced in a dynamic relationship with the PT features of questioning and imagination (Cremin *et al.*, 2013). The core features of narratives defined

in that study were: character/s, plot, sequence of events, significance to children and emotional/aesthetic investment. Both teacher and child-initiated narratives in the DG, manifest in dramatic representations of events or sequence of events, and constructed individually or collectively, deserve future exploration. In my study, it was evident that the body, the coloured clothes and ribbons were used by the children to symbolise various objects, events, roles or relationships (a connection also made by the participant teacher in the preliminary interview), that possibly had an emotional significance to them and thus may have challenged their imagination offering multiple possibilities. However, this assumption needs further exploration regarding the nature and use of the material provided, including music as a potential kind of stimulus provocation.

The teachers, at the same time as providing provocations or questioning, modelled empathy, reasoning or role-modelling, mostly, though not exclusively, through facial expressions and arm/hand movements. In this way they illustrated aspects of their own PT and seemed to have fostered children's PT and particularly empathetic behaviour and reasoning. Modelling was prominent in phase 1 perhaps because the teachers wanted to provide the first scaffolds for the children's learning and wished to frame an imaginative context. Modelling may have been more useful for children less confident to express themselves, though it may have been useful for all the children since in effect the teachers, by taking an imaginative part in the DG, were modelling PT. This pedagogical element is new in the ongoing PT research and deserves further exploration.

5.2.3 *The teacher feedback*

Another new pedagogical element found to foster PT in my study is feedback, and particularly affirmative feedback provided by the teachers in terms of praise, surprise and gratification. This approach appeared to make explicit that they valued the children's contributions and may have enhanced the children's self-worth as creators and their self-determination in the activity, helping to establish a safe context in which 'wrong answers' did not exist. Affirmative feedback also seemed to prompt intentional action and risk-taking and sometimes may have served to trigger innovation. Particularly praise with head-nods, positive surprise expressed through big eyes and mouths and gratification shown through smiling appeared to prompt the children to find something unusual to say or do. Also, eye contact and spontaneous applause on the part of the teachers may have convinced the children of the genuine nature of their teacher's affirmations. However, a closer examination of the role of feedback is needed in order to identify the ways in which such praiseful feedback is meaningful, since Alexander critiques such praise as 'habitual' (2008, p.49), suggesting, in contrast to the evidence from my study, that it may be ineffective.

The teachers' responses can also be considered as a form of feedback. Re-voicing was the most common type of responding in this study and was manifest especially during the circle settings in phases 2 and 4. Through re-voicing children's utterances the teachers may have been acknowledging their contributions and perhaps indicating approval of their multiple ideas, this may have enhanced their confidence. Re-voicing, a situation in which the teacher repeats, fully or partially, what the child had said in the immediately preceding turn in a circle, has been identified as a marker of acknowledgement that serves as a type of 'filler' to sustain group involvement, not to stimulate discussion (Yizat & Zadunaisky-Ehrlich, 2008, p.221).

Its role is unclear in DG and as such, the relationship between re-voicing and children's PT in DG deserves further exploration, although it is always combined with other pedagogical elements and as such will need to be examined in context and in relationship with the other pedagogical features. In my study, the teachers additionally completed the children's utterances when they were seeking to model reasoning and responded to the children explaining or clarifying issues in order to stretch their ideas.

5.2.4 The teacher pauses

The teachers' pauses were manifested within their standing back approach that seemed to profile children's agency, providing the children with time and space to participate in the activity. At these moments the teachers demonstrated active listening and observed the children's behaviour in order to provide responsive feedback. While standing back their bodies talked instead; some examples from the episodes were the use of head-nods for supporting the children's utterances, the use of big eyes and open mouths to express surprise for something interesting or unusual and smiles to show pleasure in the children's performance. As a result, it appeared that the children became agents of their own learning and determined the development of the lesson based on their needs and interests. They used their imaginations and sometimes became innovative. The teachers stood back in every phase of the DG, most especially in the third phase.

Overall, I perceive that teacher's responsive intervention (questions, provocations, modelling and feedback) was balanced with standing back in the examples examined and that appeared to have fostered children's PT in the DG. The teachers intentionally stood back in some cases - for example during phase 3 of the DG - but appeared sensitive and responsive to the children's participation, so as to further support or challenge their thinking. This interpretation

is in alignment with the arguments of another recent PT study that highlighted the balance between standing back and 'stepping forward' in pedagogy (Craft *et al.*, 2012b, p.60) and the characterisation of teacher as 'meddler in the middle' (McWilliam, 2008, p.265). Meddling in the middle is also identifiable in my study as teachers were playing alongside children and mediating development of PT using questions, provocations and modelling, standing back and then offering feedback, although this pedagogy not always manifest in a linear way. Teachers and children seemed to co-create their social world, supporting McWilliam's arguments regarding teacher and student as co-directors and co-editors of their social world (*ibid*, p.263). However, she stressed the role of using errors (teacher's and children's) in collaborative critique and argues for useful ignorance rather than affirmative feedback as my study indicates. However, McWilliam does assert the significance of experimenting and risk-taking on the part of the teacher, behaviour that values teacher's PT.

Regarding teachers' body language, as both a researcher-observer of someone else's behaviour and also as a participant teacher reflecting on my own behaviour, I think that body language was mostly spontaneous and probably a more intuitive process compared to verbal language/talk. This does not mean it was an unconscious process because the long-standing professional experience of both teachers may have nurtured their consciousness for acting in a certain way. The teachers showed supportive body language. For example, they used eye contact in all forms of interaction with the children, possibly indicating an authentic, responsive and caring pedagogy. They were also close to the children and sometimes moving alongside them. Additionally, their facial expressions and hand-arm gestures may perhaps have expressed their thoughts and emotions to the children.

This section focused on teacher talk and body language in relation to children's PT in the DG lessons. I argued that the teachers seemed to use a 'Possibility Broadening Communicative Style' (PBCS) using mainly possibility broad questioning, provocations, modelling and affirmative feedback, though also standing back in selected cases, and this appeared to have fostered children's PT.

5.3 The enabling context of DG for nurturing PT in the classroom

In this section I consider the vital role of the enabling context in nurturing PT in the classroom and establishing a dynamic relationship among teacher and children, which emerged through the data analysis. I firstly discuss the specific characteristics of this context, which were found to enable PT in the DG lessons under study, and then move to explore the relationship between teacher talk and children's PT, which was the third research question, using a diagram (Figure 6).

Play: A characteristic of the DG context that appeared connected to PT was play, in terms of physically engaged improvisation, playing with new possibilities, being in an 'as if' space and having fun. The children improvised their individual and group enacted stories in the 'as if' context of DG manifesting both individual and collaborative play. The construction of children's PT in the DG, as documented across all the critical episodes of this study, was found to be connected to physical engagement. Arnold (2005) argued that the body is the basis of consciousness and perception and that the state of consciousness through sensory awareness can be in partnership with reason. Thus, I argue that the playful dramatic context of DG,

which was evidenced in part through physical engagement, facilitated the fostering of PT. Possibility thinking was manifested in and through imaginative play, echoing Vygotsky (1966) who argued that play encompasses thought and imagination coming into action through the expressive acts of the body. The findings of my study reveal the relationship between teacher talk and children's PT in a playful context, offering examples of how thoughts and imagination came into action through enactment and use of the 'dramatic body'.

As a result, the idea of 'embodied PT' emerged, echoing the conceptualisation of Craft and Chappell (2009) within dance education. These authors made a first attempt to demonstrate embodied PT mapping embodied knowing and creative process in dance education (Chappell, 2006) offering examples of pedagogy and an enabling context. Their findings shed light on teaching strategies that enabled embodied PT, such as the standing back approach and the permissive and encouraging environment: teachers holding back from intervening, offering time for children to respond to challenges and ownership in sourcing ideas for dance. Furthermore, the learning environment was found to be enabling when multiple possibilities were encouraged and the feeling of being safe to take risks was enhanced. However, the study was not peer-reviewed. My work, which attempts to inform academics and professionals and also seeks to inform policy, moved these ideas of PT pedagogy and enabling context forward providing specific examples of teacher talk and body language that may be related to children's PT in the DG and opening doors for future research on embodied PT.

My finding about play as a feature of the enabling context for PT in DG accords with the findings of recent PT studies (Craft *et al.*, 2012a, 2012b, Cremin *et al.*, 2013), with play seen as a 'process-outcome' close to 'imagination' (Craft *et al.*, 2012a). The distinctions and

synergies between imaginative behaviours and playfulness in PT deserve further exploration, in DG and other contexts.

Immersion: Another characteristic of the enabling context that appeared connected to PT was immersion. The children were observed to be immersed in their imaginative world play and commented upon this in the VSR. They seemed to have incorporated all their senses and been joyful, manifesting many cycles of reflection and ‘flow’, which is defined as a happy state of mind, the feeling of complete and effortless engagement in a playful activity, and an experience of deep enjoyment (Czikszenmihalyi, 1996, p.110). It may be that children’s agency during DG increased their interest and thus motivated them to participate and become absorbed in their imaginative world play.

Openness: The real and imaginative open space of the DG may have seemed safe for the children to have their voices heard, they had the opportunity to express their needs and interests, assume their self-chosen roles and make their own choices/decisions. The openness of this ‘if world’ may have promoted safety for two reasons: the safe veil of the roles may have given the children the opportunity to express their feelings and in the intimate climate established in the classroom, everyone was considered an equal player; there were no losers in the game. Open (possibility broad) questions, provocations for exploration and modelling of empathy and reasoning, standing back and affirmative feedback were the pedagogical elements connected to openness found as important for fostering PT in this study.

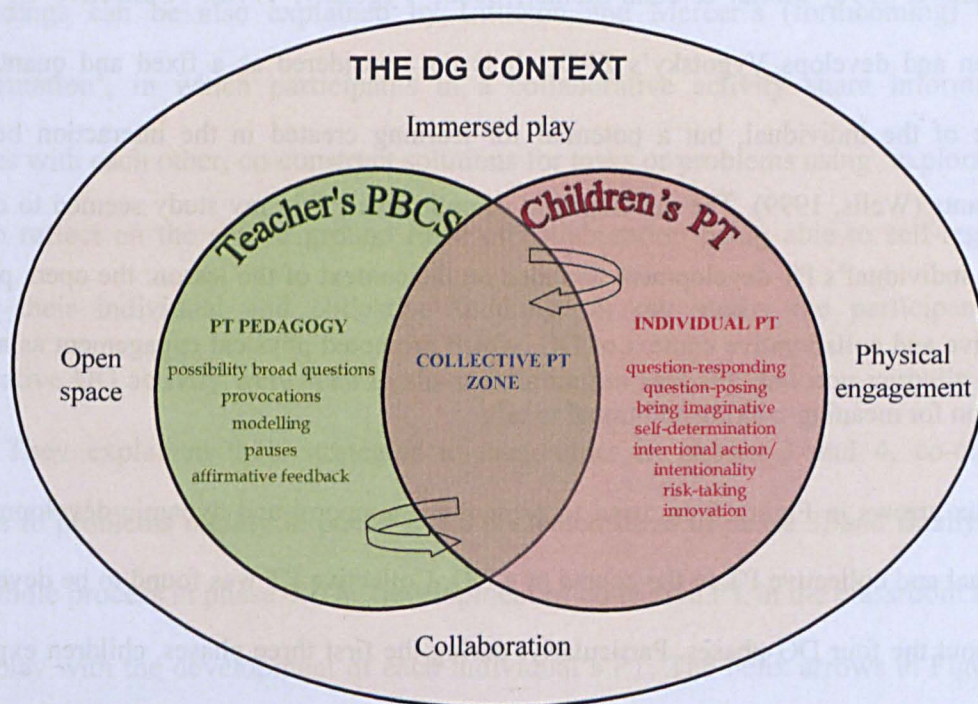
The open context seemed to unlock doors for dialogue (question-posing, responding and feedback), intentional action and occasionally risk-taking in order to co-determine innovative ideas. The children were able to try out possibilities, experiment, explore the environment and materials, accept alternative understandings of an issue, question, reflect and express their thoughts and feelings in a collaborative manner. Additionally, the real multidimensional space in the classroom seemed to give children opportunities for movement, exploration and interaction. Their physical engagement seemed to increase the opportunities for exploration and at the same time expression of ideas; it provided children with enjoyment, may have advanced their perception and was a tool for communicating their thoughts and feelings.

Collaboration: The findings of this study highlight the important role of collaboration in the classroom in order to develop PT in DG. Extending previous findings on the role of peer collaboration in PT (Craft *et al.*, 2012a), this study also documented teacher-child collaboration both with individual children and in whole-class settings (this may be called ‘communal collaboration’). Peer collaboration was also manifest both in groups and in whole-class activities. Collaboration was evident in verbal behaviour (building ideas together through talk) and in non-verbal forms (collaborative physical acts). The circle setting may also have promoted this collective way of working and enhanced the manifestation of collective PT in a community of practice. What I mean by ‘collective PT’ is co-determined PT manifest in the classroom by teacher and children when they shared multiple ideas. Collective PT was mainly evident through question-responding and particularly building upon previous contributions, negotiating, clarifying and reasoning, and also through co-determined physical actions.

Answering my research questions around children's PT and its relationship to teacher talk, I have seen that children's PT interrelated with teachers' PT. The teachers created an open context for the children to explore and think of possibilities and at the same time modelled some forms of knowing, such as empathy and reasoning. The children in their turn were enabled to express their interests and needs and then the teachers provided affirmative feedback showing a considerable degree of receptivity and openness. This collaboration between the teacher and the children and amongst the children themselves in the social context of the DG classroom seemed to further the opportunities for PT.

This process of co-authoring PT in the classroom raises connections between interpersonal and intrapersonal creativity, supporting Vygotsky's theory that developmental activity happens first at an inter-psychological and then at an intra-psychological level (Vygotsky, 1978,1986). From this point of view, individuals develop through interactions with the world and these interactions inform and mediate intra-psychological mental processes which can become conscious and self-determined. My study gives examples of how co-determination of choices and decisions may lead to co-determined or self-determined actions, for example through empathy, advancing the understanding of the relationship between self-determination and collaboration or between individual and collaborative/communal creative ideas. This latter insight echoes the results of Chappell (2006) in dance education about the dynamic relationship between individual and collaborative creativity and how one might productively feed the other and extend onto a communal level. It also endorses the findings from the study of Craft *et al.* (2012b) that this blending of individual, collaborative and communal creativity can be considered as a new PT strand. In this recent work, Craft *et al.* observed adults and children playing together and considered the interconnectedness of the individual with collaborative and communal creativity.

My study was able to detect some new ways in which teacher talk and body language relate to pedagogical elements such as questioning, provocations, modelling, feedback and standing back (pauses) enriching previous research on PT pedagogy (Cremin *et al.*, 2006; Craft *et al.*, 2012b). The following diagram (Figure 6) attempts to illustrate the relationship of teacher talk and body language, which I call the teacher's 'Possibility Broadening Communicative Style' (PBCS), with children's PT in the enabling context of DG. I have chosen the term 'communicative style' rather than 'pedagogy' to show the interactive communication between the teacher and the children in the DG; it is not only the teacher who showed the way to learn to the children but children often led and were followed by their teacher into their own imaginative worlds.



PBCS: Possibility Broadening Communicative Style
(talk and body language)

PT: Possibility Thinking

Figure 6: Teacher and children co-authoring PT in the DG

This diagram (Figure 6) is used to show that teacher and children in this study interacted and co-authored PT in the DG classroom, manifesting what I call 'collective PT'. The findings showed that possibility broad questions, provocations, modelling, pauses, and affirmative feedback on the part of the teacher fostered children's PT - their self-determination, imagination, intentional action, questioning, innovation and risk-taking in the open, playful, collaborative and immersive context of DG. The children in their turn, participating both verbally and non-verbally, stimulated their teacher's feedback, further questions, provocations, modelling and times of silence (pauses), helping the teachers to understand the learners' ideas and respond to their interests. Collective PT is conceptualised as being developed in a collective zone, which may function as a collective zone of proximal development- ZPD (Moll & Whitmore, 1998; Moran & John-Steiner, 2003; Vygotsky, 1978). 'Collective PT zone' draws on and develops Vygotsky's ZPD. It is not considered as a fixed and quantifiable attribute of the individual, but a potential for learning created in the interaction between participants (Wells, 1999). The development of collective PT in my study seemed to depend on each individual's PT development and also on the context of the lesson: the open, playful, immersive and collaborative context of DG, which promoted physical engagement as another mediation for meaning-making additional to talk.

The helix arrows in Figure 6 are used to present the temporal and dynamic development of individual and collective PT in the course of a DG. Collective PT was found to be developing throughout the four DG phases. Particularly, during the first three phases, children expressed and justified their individual ideas co-constructing meaning and co-determining decisions with their teacher and peers. In the last phase, they reflected on their group processes and individual feelings and argued about their collective decisions in a whole-class dialogue co-ordinated by

the teacher. This temporal development of collective PT during the four DG phases may have functioned in a way similar to the way Tharp and Gallimore (1998) proposed the four stages of the ZPD. During the first phase, the children seemed to have a very limited understanding of the goal to be achieved or the problem to be solved, so the teacher needed to offer more provocations and modelling. At the second phase, the children began to direct their behaviour with their speech building on each other's contributions. At the third phase performances were already developed and presented verbally and physically, so that assistance from the teacher was not necessary and might seem disruptive. At the final phase, there was a mix of co-determination and self-determination of ideas in whole-class dialogues, describing and explaining thinking strategies and feelings to the others based on their comments or questions.

The findings can be also explained by Littleton and Mercer's (forthcoming) theory of 'transformation', in which participants in a collaborative activity share information and strategies with each other, co-construct solutions for tasks or problems using 'exploratory talk' and also reflect on the shared ground rules of collaboration being able to self-regulate and develop their individual and collective thinking. In my study, the participants in the collaborative DG activity were seen to share information verbally and non-verbally in all DG phases. They explained their strategies to each other in phases 3 and 4, co-constructed solutions to problems mainly in phase 2 and presented them in phase 3, and finally reflected on the whole process in phase 4. The development of collective PT in the classroom seemed in an interplay with the development of each individual's PT. The helix arrows in Figure 6 also present the dynamic relationship between individual and collective/social in my study and are used to show that transformation occurred in all parts: the children, the teacher, their relationship and the activity of DG itself. The activity of DG can be characterized as

‘inherently social and cultural, although carried out at any time by particular individual participants’ (Wells, 1999, p.322).

‘Exploratory talk’, as referred in the above theory of ‘transformation’, is defined as a cultural linguistic tool which helps a group of people achieve creative, justifiable solutions to problems; it is underpinned by partners taking a meta-cognitive stance on their activities, being self-aware of how they work together and being able to co-regulate their activities successfully (Littleton and Mercer, forthcoming). The ground rules on which exploratory talk is based, according to the same authors, are the following: a) everyone in the group engages critically but constructively with each other’s ideas, b) everyone offers relevant information and all ideas are treated as worth consideration, c) partners ask each other questions and answer them, ask for reasons and give them, d) members of the group try to reach agreement at each stage before progressing and e) to an observer of the group, reasoning is ‘visible’ in the talk. Engaging in exploratory talk, it is argued, can stimulate the participants to jointly reflect on adequacy of the ground rules they are using to talk and work together (*ibid*). The above characteristics of reasoning, reflection and co-construction of ideas were documented in my study through children’s verbal and non-verbal language as relative to their PT. At the same time, teachers used exploratory talk in their PBCS when they prompted reflection, when they modelled reasoning and when they asked for the children’s opinions and reasoning negotiating perspectives and accepting alternatives.

This simultaneous use of exploratory talk by all participants in the DG suggests the use of the term ‘exploratory dialogue’ (Wegerif, 2005, p.235). The Greek word ‘dialogue’ refers to the use of talk through any number of voices for the co-creation of meaning and the co-construction of knowledge (Wegerif, 2006, p.59). The reason why PT may be related to

exploratory dialogue can be explained by the social constructivist framework of learning, which posits that language and the development of thought are inseparable in a social process; high-quality talk contributes to scaffold children's understanding from what is currently known to what has yet to be known (Vygotsky, 1986; Alexander, 2008). Exploratory dialogue can be considered as high-quality talk, because it is viewed as adding critically and constructively to each other's ideas; it is characterized by justifications and reasoning, alternative hypotheses and joint decision-making or problem-solving.

In my study, I focused on the characteristics of teacher talk and body language, although I also investigated children's verbal and non-verbal language to examine their PT. Teacher's PBCS, functioning as semiotic mediation through talk and body language, seemed to extend children's PT and at the same time be extended by it in a collective PT zone. It is argued that all participants can learn with and from each other if they engage together in dialogic inquiry (Wells, 1999). In my study, it was evident that the social use of language was linked to the psychological development of children, in accord with Vygotsky's (1978, 1986) claims. Learning to use talk and body language, as well as other drama tools (e.g. props) for meaning-making, seemed to have occurred through participation in jointly undertaken activities amongst children and their teacher. The aforementioned findings support the 'dialogic theory of learning to think' (Wegerif, 2011, p.179) and the theory of 'interthinking' (Littleton & Mercer, forthcoming), which both argue that people can think together through language.

The teacher and the children in my study shared control on learning making use of shared cultural tools, such as language and other semiotic mediations (e.g. body language, props, and audiovisual stimuli). The teachers expressed their trust to the children's abilities asking possibility broad questions, listening and observing the children's performances. At the same

time, they responded to the children's questions or statements providing affirmative feedback and additional provocations and/or modelling if needed. Children, in their turn, were seen to share their meaning-making with their teacher and peers in a 'transactive teaching system' (Moll & Whitmore, 1998, p.133). The findings of my study support Moll and Whitmore's research findings, which led the authors to claim that when the teacher acts as a safety net allowing and encouraging children to stretch their potential and to take risks, then the children experiment with new possibilities and thus their PT is developed. The findings of my study also concur with Moll & Whitmore's findings that the goal of this mediated assistance is to make children consciously aware of how they think and act and more generally self-determine their learning processes, which is a meta-cognitive skill. In Vygotskian terms, higher mental functions can move from the socially regulated to the self-regulated through 'assisted performance', which defines what a child can do with the support of the environment, of others, and of the self (Tharp & Gallimore, 1998, p.96).

Teacher's PBCS can also be related to 'dialogic teaching' because it fostered a 'collective, reciprocal and supportive' relationship amongst the children and their teacher (Alexander, 2008, p.38). The enabling context of collaboration, immersed play and physical engagement in the open space of DG seemed to create the appropriate classroom dynamics and ethos in order to provide opportunities for these features of dialogic teaching to emerge. Teacher and children were supported reciprocally and their creativity was transformed through their collective PT zone. The other two principles of dialogic teaching, 'cumulation' and 'purposefulness' (*ibid*), can be also related to PBCS, but to a lesser extent because of the imaginative context and the open space created in the DG. Particularly, teachers in every DG had some educational purposes in mind, based on the lesson themes, and during the DG they were building on their own and the children's ideas to steer the classroom dialogue towards

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those purposes. However, teachers were at the same time open to alternative ideas and the secondary lesson purposes were often transformed through an activity enriched by the children's interventions. The fact that the children contributed to the creative outcomes of the lesson possibly made them feel part of the pedagogy and this latter characteristic of the DG lesson perhaps makes it more dialogic.

In my study, the teachers' questions were mainly open and challenged thinking and reasoning. Additionally, their pauses provided children time to think, as suggested by the evidence-based theory of dialogic teaching. The only finding of my study that is not in complete accord with Alexander's (2008) suggestions is affirmative feedback. He suggests 'informative diagnostic feedback' (p.44) to replace mere affirmative feedback or re-voicing in order to avoid habitual praise and provide a meaningful feedback on which children can build their ideas later. However, feedback noted in my study was usually affirmative because of the open imaginative context and this seemed to provide children with the positive emotions to express themselves, made them feel part of the lesson and in this sense it was meaningful to them. Informative diagnostic feedback was though offered by the teachers through question-responding and follow-through questions or provocations. For example, the findings showed that the teachers responded to the children's questions explaining or clarifying in order to stretch their ideas. They were also posing follow-through questions in order to prompt children to justify their hypotheses and often used provocations so that the children use their imagination more, be more active or reflect on previous ideas and actions. However, mere affirmative feedback documented in my study in terms of praise, surprise and gratification was seen to have promoted children's confidence, fostered their self-determination in the activity, prompted intentional action and risk-taking and sometimes nudged innovation. Particularly praise using head-nods, positive surprise using big eyes and mouth and gratification using a smile on the

part of the teacher seemed to have prompted the children's will to find something unusual to say or do. Nevertheless, I believe that the issue of feedback is crucial for the development of PT and needs further investigation in the future, both in the DG and other contexts.

The four DG phases appeared useful for the development of PT, because they functioned like the four stages of the creative process proposed by Wallas (1926), which had been analysed in chapter 2: preparation, incubation, inspiration or illumination, and verification. Although PT and creativity may not be able to appear through a linear, step-by-step process, the four stages proposed by Wallas (1926) may represent some of the conditions necessary for PT to emerge and develop. In the same way, the four DG phases seemed to have acted as a helpful process for the development of PT: In phase 1, the children were preparing for the next tasks exploring the environment and gathering information through sensory immersion. During the same phase, they also seemed to be passing through the incubation stage and be connecting to their unconscious, since they were usually relaxing down to the floor and listening to the teacher's provocations for visualisation. Then, in phases 2 and 3 of the DG, the children both individually and collectively with their teacher and peers seemed to have managed to reach solutions to certain problems, having passed through a multiple illuminations stage. Finally, in phase 4 of the DG, a critical evaluation of these solutions was taking place each time through a reflective whole-class dialogue, possibly in the plane of consciousness. This final phase was found extremely useful for the development of children's meta-cognitive skills in order to verify their own creative endeavours and learn ways to advance their PT in the future. The connection of the DG phases with the four stages of the creative process developed by Wallas (1926) may illustrate that DG is a creative activity, reflects in microcosm core elements of creativity and thus needs to be recognised and utilised as a tool for developing children's creativity in schools.

The next chapter presents the conclusion of this research study, it includes critical reflections upon the limitations of the work, the contribution of this thesis to theory and research and consideration of the emerging implications for practice, policy and further research.

6 Conclusion

This study has documented PT in Cypriot primary classrooms exploring the relationship between teacher talk and children's PT in the context of DG. The findings constitute an important step beyond what had been previously identified regarding characteristics of children's PT, PT pedagogy and the enabling context. In particular the findings focus on the features of children's PT and the ways in which they are made manifest in the DG, the types of teacher talk and elements of teacher body language which are seen as aspects of an 'embodied pedagogy'. In addition, the study reveals some characteristics of the DG context which enable co-determination of PT by teacher and children in the classroom. Conclusions derived from the above findings are presented in this chapter, seeking to make clear the contribution of this study both to theory and research. Methodological limitations are also presented, and then I refer to possible implications for policy, practice and further research.

6.1 Key findings and contribution of this research

The findings presented in this thesis respond to the three specific research questions that were addressed in chapter 4 (sections 4.1, 4.2 and 4.3). The following concluding discussion revisits the main research findings (in sub-sections 6.1.1, 6.1.2, and 6.1.3), seeking to make clear the contribution of this work to the field, and then considers the emerging issues.

6.1.1 *The features of children's PT in the DG*

The main features of children's PT manifested in this study were questioning, imagination, self-determination and intentional action, whilst innovation and risk-taking were also

documented to a lesser extent. All these PT features were presented both verbally and physically.

Children responded to teachers' questions making possibility broad hypotheses, often building upon previous contributions, usually negotiating, clarifying, reasoning, problem-finding and sometimes problem-solving. They more rarely posed 'what if' and 'as if' (in-role) questions to the teacher and their peers negotiating meanings. Thus my study reinforced the feature of questioning as a crucial PT feature. The findings of this study also reinforce some other identified PT features, such as imagination, self-determination and intentional action (Burnard *et al.*, 2006; Cremin *et al.*, 2006; Chappell *et al.*, 2008; Craft *et al.*, 2008, 2012a, 2012b).

Both children and teachers were in an 'as if' space and assumed fictional roles in imaginatively co-created worlds. They were also using empathy, a thinking process not observed in the previous multiple PT studies, which I would argue should be considered as part of the PT characteristic, imagination. The children manifested empathy in-role but also out of role, in an endeavour to reflect on their in-role strategies during phase 4 of the DG. This ability to transform and imaginatively shift from what you are to what you might be closely relates to the notion of PT (Craft, 2011).

The study provides further analysis of the notion of self-determination as including self-directed and confident choices and decisions, spontaneous expressions and the meta-cognitive skills of reflection and strategy use. It expands the understanding of this feature and raises questions for further research in other contexts than DG. My study also provides empirical insights around intentional action and makes a distinction between intentional action and intentionality, defining the latter as verbal intention for action and proposing a distinction between the process of co-determining intentions for actions in the classroom and the self-

determined intentional action that may be an outcome of the creative process. Innovation is also considered as a possible outcome of PT, echoing the results of previous PT studies (Chappell *et al.*, 2008; Craft *et al.*, 2012a and b); it was evident both in individual forms and in collective products, for example the group performances, expanding previous PT work. Risk-taking was manifested individually in this study, in the form of taking a risk to say or do something with some level of danger or fear, for example during personal exposure to the whole class. Though it was only occasionally documented, it was not absent as in a recent PT study (Craft *et al.*, 2012a).

6.1.2 The types of teacher talk and body language in the DG

This study was able to detect some new ways in which teacher talk and body language, which I call the teacher's 'Possibility Broadening Communicative Style' (PBCS), relate to pedagogical elements such as questioning, provocations, modelling, feedback and standing back (pauses) enriching previous research on PT pedagogy (Cremin *et al.*, 2006; Craft *et al.*, 2012b).

The teachers mainly asked possibility broad leading questions which seemed to increase the space for imagination and multiple hypotheses on the part of the children. This finding is in alignment with previous PT findings on the importance of the leading question (Craft *et al.*, 2012b) and adds to this argument presenting the broad degree of possibility inherent in the leading questions as a key factor for fostering children's PT. Subsequent questioning, such as service and follow-through questions as in Chappell *et al.*, (2008), was also possibility broad or moderate and this appeared to extend children's PT. Possibility narrow questioning was manifest only once, perhaps because DG appears as a 'what if' world full of possibilities. The categorisation of teacher's questions as challenging, clarifying, critical and process contributes

a more nuanced understanding of the questioning stance which is seen to be a core element of PT pedagogy. Teacher questioning was also manifest through arm movements and facial expressions.

Teachers used provocations for imagination, action and reflection in the DG, welcoming the children in the activities and making them feel safe to participate. These findings are also in tune with those of a previous PT study that found the role of stimulus provocation important for fostering children's PT (Craft *et al.*, 2012b). However, the role of props and music as stimulus provocations in the DG needs further exploration. The teachers, at the same time as providing provocations or questioning, modelled empathy and reasoning or used role-modelling, mostly, though not exclusively, through facial expressions and arm/hand movements. In this way they illustrated aspects of their own PT and seemed to have fostered children's PT and particularly their empathetic behaviour and reasoning. The pedagogical element of modelling is new in the ongoing PT research and deserves future exploration.

Another novel pedagogical element found to foster PT in my study is feedback, and particularly affirmative feedback provided by the teachers in terms of praise, surprise and gratification with a supportive body language. The teachers' responses can also be considered feedback. Re-voicing was the most common type of responding in this study and may have been useful for acknowledging the children's contributions and indicating approval of their multiple ideas, perhaps enhancing their confidence. The teachers' pauses manifested their standing back approach that seemed to profile children's agency, providing the children with time and space to participate uninterrupted in the activity. At these moments the teachers demonstrated active listening and observed the children's behaviour in order to provide

responsive feedback. The result from this approach appeared to be that children became more agentive and determined the development of the lesson based on their needs and interests.

6.1.3 The relationship of teacher talk and children's PT in the DG

This study concluded that teacher talk and young children's (aged 8-9) PT in the DG are in interplay. Features of children's PT manifested in the open, playful, immersive and collaborative context of DG, such as imagination, question-responding and question-posing, intentional action, self-determination, risk-taking and innovation, seemed to interrelate with teacher 'Possibility Broadening Communicative Style' (possibility broad questions, provocations and modelling, pauses and affirmative feedback). Teacher pedagogy appeared to play an important role in eliciting and fostering children's creativity and at the same time children's contributions were seen to influence teacher pedagogy in the thick of action.

The pedagogical elements that were manifest through talk and body language may be seen as connected to teacher's own PT. The emerged categories of teacher questioning (challenging, process, critical and clarifying questions), modelling of PT and responsive affirmative feedback, which are all new themes for PT pedagogy, illustrate acceptance of various and alternative possibilities and at the same time expression of the teachers' own PT. Teacher and children seemed to co-author PT in the classroom and the nature of their PT in the DG was documented as both individual and collective, verbal and physical.

Collective PT appeared to develop amongst children and teacher in a collective PT zone, which may be considered as functioning like a collective ZPD (Moll & Whitmore, 1998; Moran & John-Steiner, 2003; Vygotsky, 1978), drawing on and developing Vygotsky's ZPD; it is not considered as a fixed and quantifiable attribute of the individual, but a potential for learning created in the interaction between participants (Wells, 1999). The dynamic

relationship between collective and individual PT seemed to foster the development of both.

This provides an answer to my study's question regarding the relationship between teacher talk and children's PT in the DG method, supporting their reciprocal development.

Teacher's PBCS in my study presented all the characteristics of 'dialogic teaching': collective, reciprocal, supportive, cumulative and purposeful (Alexander, 2008, p.38). Teacher and children were supported reciprocally and their creativity was transformed through their collective PT zone. 'Cumulation' and 'purposefulness' (*ibid*) were also seen relative to PBCS, but to a lesser extent than collectiveness, reciprocity and support, because of the imaginative context and the open space created in the DG. Particularly, teachers in every DG had some educational purposes in mind, based on the lesson themes, but at the same time they were open to alternative ideas and the secondary lesson purposes were often transformed by the children's interventions.

Teachers used features of 'exploratory talk' (Littleton and Mercer, forthcoming) in their PBCS: they prompted reflection, modelled reasoning and asked for the children's opinions and reasoning negotiating perspectives and accepting alternatives. The characteristics of reasoning, reflection and co-construction of ideas were additionally documented in my study through children's verbal and non-verbal language as relative to their PT. This simultaneous use of exploratory talk by all participants in the DG suggests the use of the term 'exploratory dialogue' (Wegerif, 2005, p.235), referring to the Greek word 'dialogue' which means the use of talk through any number of voices for the co-creation of meaning and the co-construction of knowledge (Wegerif, 2006, p.59).

The DG context was found enabling for the development of both individual and collective PT because of the open, playful, immersive and collaborative space that was created during the

particular method. Through this research I may characterize DG as collaborative play open to possibilities that engages participants in learning both verbally and physically. The study reinforces play and immersion as contextual features, being in alignment with the findings by Craft *et al.* (2012b), expands the impact of collaboration from the previously identified peer collaboration (Craft *et al.*, 2012a) to teacher-children collaboration also and raises the issues of physical engagement and openness as important contextual factors for the fostering of PT. Openness was identified both in pedagogy (open questions, provocations for exploration, modelling of empathy and reasoning, standing back and affirmative feedback) and in the real and imaginative open spaces of the DG. Future work on the DG context is needed to illuminate the relationships amongst participants that enhance PT and learning.

Reflecting on the creativity agenda and having analysed the PT features in the DG lessons, I wish to argue that creativity in this study is experienced through the notion of PT as an everyday phenomenon and both as individual and collective. So, I propose that little-c or everyday creativity (Craft, 2001) may include ‘mini-c creativity’ (Kaufman & Beghetto, 2009), which describes the personal/individual attributions inherent in the creative process, together with collaborative/communal creativity (Chappell, 2006, Chappell *et al.*, 2012). My study may offer some contribution to the conceptual work undertaken by Kaufman and Beghetto (2009) in the USA and the empirical work taken by people researching PT in England and Taiwan (Burnard *et al.*, 2006; Craft *et al.* 2012a, 2012b; Chappell *et al.*, 2008; Cremin *et al.*, 2006; Cremin *et al.*, 2013; Lin, 2010), providing evidence that raises the insights into the processes as children make the transition from interpersonal/collective PT and co-determination of creativity to individual PT (intrapersonal meaning-making) and self-determined creative learning.

Overall, my study offers some insights for the further understanding of PT in primary education and contributes to address some of the gaps in the PT empirical literature, concerning for example the documentation of imaginativeness in a playful activity, the documentation and the role of self-determination and intentional action in PT, the nature of collaboration that fosters PT, the role of risk-taking in PT, and the relation of PT to everyday creativity as a phenomenon useful for solving everyday problems and change everyday life. Further exploration and closer examination of these concepts is needed in the future.

6.2 Methodological evaluation: contribution and limitations

The VSR research method contributed significantly to the findings of this study supporting the analysis of data alongside the fine grained analysis of the critical episodes; the teachers' and children's views in the VSR sessions often provided explanations for the data and enabling connections to be made to the critical episodes transcripts. The inclusion of children in the VSR sessions is new addition to current PT research and has not to my knowledge been used before within research in drama education. Thus my study presents another way of developing knowledge about the young learners' perspectives; the value of VSR has been demonstrated in revealing the young participants' standpoints, matters of interest and their perceptions on relationships. However, it requires the researcher to avoid prompting and to remain open to all comments, avoiding offering feedback too explicitly, an issue I found a challenge within the research. One limitation of the VSR sessions which occurred during the data collection was that the children participating in the chosen episodes were not all interviewed, as due to pragmatic reasons and sampling within the data set I chose to randomly select learners for the group interviews.

The fact that I have been an inside researcher in this study examining my own lessons has been fruitful for the coding of data because it has given me the advantage to experience the conversations in situ. Also, my professional knowledge as a teacher using the method of DG for ten years also helped me code the data from the other teacher's lessons. However, the coding of the data raises issues of reflexivity and subjectivity; I sought to respond to this assiduously and made use of the pilot study to develop systematic practices. In addition, I sought to combine four different perspectives in this study (the researcher's, the teacher's, the children's and the camera's recording the lessons); this enabled me to consider alternative views of reality.

Another limitation of my study is that the episodic analysis may have not managed to document all the pedagogical strategies offered by the teacher and which were related to children's PT during the lessons. It might be that for example, early imaginative provocations influenced the children's later imaginative contributions in a later DG phase. In future, it may be advantageous to analyse larger sections of lessons, or whole lessons, though despite this, due in part to the phased nature of DG, I was able to show some of the relationships between the teachers' pedagogical stories and the children's PT through the use of critical episodes from certain phases. For example, children in phase 4 were seen to reflect on previous phases, and this meta-cognitive skill is considered as part of the process of self-determination, a critical PT feature. Perhaps more PT studies need to document children's learning across lessons and also make use of children's VSR, if researchers would like to examine the potential presence of children's meta-cognition.

In a future development of this research I would like to explore more fully peer collaboration and the relationship between interpersonal and intrapersonal learning processes in the DG; this

could be undertaken through paying closer attention to the group discussions/preparations in Phase 2. These were not investigated in this study due to technical difficulties. This could be achieved by using a camera to focus on one group, and group members might wear special microphones that increase volume only in the video, in order not to disturb the other groups while working. Something else that would be interesting and that my study did not encompass is examination of the value of the material provided and the music used in the DG for developing PT.

As discussed earlier in the methodology chapter, my study whilst examining only four classes and six lessons-cases does not attempt to generalise conclusions about teacher pedagogy in DG but to provide useful information to practitioners who detect transferability of the findings to their own cases.

6.3 Implications for policy

The findings seek to inform Cypriot policy about the potential of DG as a teaching and learning tool in primary education, especially in relation to PT and everyday creativity. The connection of the DG phases with the four stages of the creative process: preparation, incubation, illumination, and verification, developed by Wallas (1926) may illustrate that DG is a creative activity, reflects in microcosm core elements of creativity and thus needs to be recognised and utilised as a tool for developing children's creativity in schools. This will be a salient contribution to the recently designed drama curriculum (CMEC, 2011b), since it is the first research study on drama in Cypriot primary education. On the basis of this study, I intend to submit recommendations to the policy-makers arguing the value of DG and suggesting the systematic use of this method to foster children's creativity. Firstly, I recommend in-service training courses because the teachers need to exercise the various pedagogical possibilities

derived from this thesis. The analysis of the DG context as open, playful, immersive and collaborative, emerged through the findings of this study, explains why DG may be characterized as an alternative learning method that has the potential to promote creativity, as expected in a recent policy paper (CMEC, 2011b). Specific pedagogical ways such as questioning, provocations, modelling and responsive affirmative feedback that promote peer and teacher-children collaboration are suggested, so that children can find and try to solve problems and develop their agency as learners, as suggested in another policy paper (CMEC, 2011a). Secondly, I recommend that DG should be a compulsory course in initial teacher education and be included in postgraduate programs about Drama Education or Creative Arts more generally.

6.4 Implications for practice

My professional practice has improved substantially during my research journey. At first, I developed an understanding about creativity in education and possibility thinking in particular as the driver of everyday creativity. I made connections with DG as a potentially useful method for fostering PT in primary classrooms. As the study progressed I reflected on my own and the participant teacher's professional practice to recommend some neglected but useful practices which, drawing on my research I can now see nurture children's PT. First, prompting and providing time to the children to ask questions in all the DG phases seems crucial as do the teachers responses. The teacher is called on throughout not only to facilitate learning, but also be a 'meddler in the middle', playing alongside children and experimenting (McWilliam, 2008, p.265), manifesting his/her own PT in the process. Pedagogical strategies such as provocations for imagination, action and reflection, modelling PT, possibility broad questioning, pauses and responsive affirmative feedback along with the accompanying body

language have considerable practical relevance in Cypriot education and possibly other educational contexts that value creativity. Since DG may be used as a distinct subject or as a teaching and learning tool, teachers may be able to derive suggestions from this study for their talk and body language across the curriculum. Primarily I perceive a need for in-service training and continuous professional development in the use of DG. I have already contributed to teacher training seminars and plan to train other teachers in my school and other schools in the future, being an establishing member of the Cyprus Drama and Theatre Education Association. Training can help teachers develop their pedagogy using the aforementioned creative, active and responsive strategies, to develop children's PT and creativity. The evidence from this study in Cypriot classrooms also suggests ideas for creating an enabling context for creativity as required by policy (CMEC, 2011b). This context, it was found, promotes immersed play with physical engagement, collaboration and openness as important parameters for the co-authoring of PT amongst teachers and children.

6.5 Possibilities for further research

The process of reading the relevant literature for this study, enabled me to identify some gaps in the literature, to which I sought to respond, but in undertaking my own empirical work framed around the three questions I have found that there remain multiple possibilities for further research. For example, future work could focus on the same research questions in rural contexts and/or in different ages to verify the insights drawn by this study. It could also examine the ways in which certain pedagogical strategies (e.g. feedback) or prosodic elements of teacher voice relate to children's PT in various contexts. The relationship between affirmative feedback (praise, surprise and gratification) and authentic evaluation/critique also needs further exploration, as do the development of teacher's PT and the relation of PT with embodiment. A challenging question that would be valuable to investigate is how and in what

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ways innovation can be documented in the classroom. Regarding the specific method of DG, it would be interesting to explore the relationship between certain aspects of the DG context (e.g. narratives, music, props and other stimulus provocations) and children's PT and also the nature of the learning that occurs during the group preparations in the 2nd phase of the DG, which my study was not able to document. Another aspect which also needs closer examination is the process of moving from co-determination to self-determination as part of PT in teacher-and child-initiated tasks across various contexts and across different ages. Furthermore, it would be interesting to examine further the nature of collaboration that enables PT and the notion of collective PT, perhaps in relation to the dialogic approach to teaching and learning (Alexander, 2008; Maine, 2012; Mercer & Howe, 2012; Mercer & Littleton, 2007; Wegerif, 2006, 2011).

6.6 Final remarks

In this study, the open, playful, immersive and collaborative context of DG was an emerging finding considered powerful in enhancing children's PT in Cypriot primary classrooms. The role of the teacher in establishing this context was found determinant in this research and certain elements of teacher talk and body language fostering children's PT were revealed and have opened new paths for future research. Provocations, possibility broad questions, pauses, affirmative feedback and some aspects of modelling seemed to foster the children's imagination, intentional action, question-responding and question-posing, self-determination, risk-taking and innovation. Teacher's 'Possibility Broadening Communicative Style' helped children imagine, and use their bodies to learn and collaborate with their classmates, also using meta-cognitive skills for reflection and thinking. At the same time, the children's verbal and non-verbal behaviour in the DG classroom (i.e. answers, questions, statements, actions) appeared to help the teacher use a responsive creative pedagogy illuminating that teacher and

children co-author PT in the DG classroom. I believe that the findings and the conclusion of this study may be useful to the target audience which includes policy makers, teachers, drama practitioners, educational researchers and academics.

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Appendix 1

Semi-structured group interview and VSR with children (protocol)

Hello. I am going to ask you some questions for the purpose of my research study that will be kept confidential. I will keep your anonymity using pseudonyms. I will by your approval video-record our conversation and if at any time you need to turn the machine off, please let me know. Is that ok with you?

PART A: Contextual factors and teacher's talk

1. How do you feel after your joining in the participation in the current DG?
2. What do you think you learnt today?
3. Why do you think this method is called DG? When did you actually play and why?
4. Were there parts in today's lesson in which you felt really involved- if yes, which were they?
5. Do you want to report anything you remember more from your teacher's talk?
6. Does your teacher talk differently in DG than in other lessons?
7. Does your teacher help you in DG- if so, how?
8. Do you want to continue participating in drama games? Why?

PART B: VSR for children's PT

Each of you can choose one episode from the lesson, which you find interesting and want to talk about.

1. Why did you choose this piece? What roles were you being and why?
2. Did you have any problems or challenges in this part?
3. If so how did you resolve them?
4. Did you make use of your imagination in this part?
5. It looked to me like you were doing a lot of thinking at this moment- can you remember what that was about?
6. Did you do what one person suggested in the group improvisations?
7. Did you do anything you have never done before?
8. Would you like to add something or ask me anything?

Appendix 2

Semi-structured interview and VSR with teachers (protocol)

PART A: VSR for children's PT

You can choose one episode from the lesson in which you find children's behaviour interesting and want to talk about.

1. Why did you choose this part?
2. What kinds of learning and problem solving are taking place?
3. Did you notice the children using their imagination and if yes, in which way? What was the result?
4. Did the children undertake any risk? What was the result?
5. How did the children take a decision or solve a problem?
6. Were there any features of innovation in the children's action (verbal and non-verbal) and if yes, what?
7. Give some exemplars of children's playfulness.
8. Were there any moments when children were exploring new possibilities?
9. In which in your view moments were the children immersed in the activity?

PART B: VSR for teacher's talk

You can choose one episode from the 1st, the 2nd and the 4th phase in which you find your talk interesting and want to talk about.

1. Do you think your talk/voice affected children, for example in the 1st phase?
2. Do you think your talk was different in the 2nd phase than in the 1st?
3. What about your talk during the last phase of the DG?
4. Did you feel that your talk stimulated students' imagination and action?
5. Please find any moments that you got into a role and explain why.
6. Did you say anything to the children that let them gain agency in their learning?
7. Do you think that you provided an enabling context and how?
8. I noticed you used a lot of narration. Can you tell me about that? What purpose does it serve do you think?
9. What kind of questions did you pose and why?
10. How did you respond to the children's questions?
11. Did you encourage children and in what way? What was the result?
12. Did you model at any time talk or action and if yes, why?
13. Do you think you were flexible and in what particular moments?
14. Would you like to add something or ask anything?

Appendix 3

Preliminary semi-structured interview with the teacher (protocol)

Hello. I am going to ask you some questions for the purpose of my research study that will be kept confidential. I will keep your anonymity using pseudonyms. I will by your approval video-record our conversation and if at any time you need to turn the machine off, please let me know. Is that ok with you?

1. How long have you worked as a primary schoolteacher?
2. How many years have you being using DG in primary schools and in which curricular subjects?
3. Have you attended special studies on DG or been trained in some way? If so, please provide some detail.
4. How do you understand the term DG?
5. Why do you use DG in your teaching?
6. What in your view is DG good for in terms of children's learning?
7. Is it necessary in your view that the teacher who uses DG is characterized by certain interests or talents?
8. Which do you think is the teacher's role in the DG?
9. Is there a need for the DG to become a special subject in the primary curriculum?

10. Do you believe that a special room is needed or DG may be held in the ordinary classroom?
11. Do you find the teacher's preparation necessary or he/she may also improvise?
12. Based on your experience, what is the aim of each phase of the DG?
13. Can you tell me a little about how you choose the activities of the first phase?
14. I was interested in the music, how do you choose the pieces?
15. How do you usually group the children and for what reason?
16. Do you believe the children need action boundaries and if yes, how are they set?
17. Please tell me about the questions you ask, do you see these as important? Do you tend to ask different questions in different parts of the DG? If yes, why?
18. What kind of fabrics do you use and what are they for? Do you use any other props?
19. Do you find it useful the children to lie down and close their eyes? Why?
20. Which techniques do you usually use and why?
21. Which classroom settings do you usually use?
22. Do you find any advantages or disadvantages in the DG in comparison to other teaching methods? Do you feel differently when you teach DG?
23. Do you use your voice differently in DG do you think?
24. Would you wish to add anything about the philosophy and usefulness of DG in primary education?

Appendix 4

CENTRE FOR EDUCATIONAL RESEARCH AND EVALUATION

DETAILED RESEARCH PLAN

Code: XXXXXX

Name of researcher: Vaso Aristeidou

Position: Primary teacher and a candidate for a Doctorate in Education

Members of research team: Prof. Teresa Cremin-Supervisor (The Open University, UK)

Scientific Organization: The Open University, UK

Educational sector in which research will take place: Primary

Researcher's postal address: XX

Email: XXXXXXXXXXXXXXXXXXXXXXXX

Telephone / fax: XXXXXXXX / XXXXXXXX

Research title: Exploring how teacher talk in the Drama Game (DG) relates to primary children's possibility thinking (PT).

Purpose-research questions / hypotheses:

1. *What features of children's PT are evident during the DG?*
2. *What types of teacher talk are evident during the DG?*
3. *What is the relationship between teacher talk and children's PT during the DG?*

Utility-necessity of research: The research study will investigate whether teacher talk in the DG is useful for taking forward possibility thinking of primary students. Findings may be used by practitioners who have already used DG as a teaching and learning tool and generate interest to other teachers for training. They will inform policy about the use of DG in the primary curriculum which is promoted by the new educational reform in Cyprus. They will also contribute to theory and practice around teacher talk informing researchers in the area of creativity.

Data collection process: Data collection process will be qualitative (case-study) and study will be held in the natural settings of the lessons (naturalistic inquiry). Research ethics will be taken well into consideration e.g. anonymity of research participants, permission from the headteachers and written consent from parents.

Sampling: Two third grade classes (8-9 year old students) in my school and another two in a second primary school. Focus students will be two boys and two girls from each class randomly selected. I will be a practitioner researcher conducting the lessons in my organisation and the other teacher is chosen on the basis of suitability (expert in the DG method).

Research tools:

- preliminary semi-structured interview with the teacher (video-recorded)
- six classroom observations (video-recorded)
- six semi-structured interviews with video stimulated review with focus students (video-recorded)
- two semi-structured interviews with video stimulated review with the teacher (video-recorded)
- four self-VSR sessions

Time of employment: Six 80-minute lessons, 40 minutes for interviewing the 4 focus students in each lesson and three non-working hours for the teacher interviews (1 before and 2 after the lessons).

Time period and expected time of research results:

The study will be held during March-May 2011 and final results will be expected at the end of 2012.

Appendix 5

Parents consent form

February 2011

Dear parents,

My name is Vaso Aristeidou and I am a primary teacher and candidate for the Doctorate in Education at The Open University, UK. In order to conduct my research study, I have obtained approval by the Cypriot Ministry of Education and Culture in order to carry out a qualitative research in the school where your children study. I would like to ask your approval for your children to be observed and video-recorded during the drama game lesson and the group interview that will be held after the lesson. The snapshots and transcripts from the videotaping and the interview session will have a confidential character and will be used only for the aims of the research. The anonymity of the participants will be ensured using pseudonyms.

I would like to thank you in advance for the collaboration and to ensure that the particular research study aims for the qualitative upgrade of education.

Authorisation

The chaperon named.....of the student
named..... attending the third class at
the.....Primary School, I allow the teacher named Vaso Aristeidou to observe
and video-record my child during the drama game lesson and group interview
on,03/2011 and then use the derived data only for the aims of her
research study.

Date:

Signature: